ROUX ASSOCIATES INC



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June 11, 2002

Mr. Anthony Karwiel
New York State Department of Environmental Conservation
Bureau of Construction Services
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, New York 12233-7013

Re: Installation of Product Recovery Wells and Completion of
Well Monitoring and Product Recovery Activities during May 2002
124-136 Second Avenue
Brooklyn, New York
Site No. V00405-2

Dear Mr. Karwiel:

Roux Associates, Inc. (Roux Associates), on behalf of FC Gowanus, LLC, recently completed the installation of forty-three (43) product recovery wells and five (5) weekly well monitoring and product recovery events at the former manufactured gas plant (MGP) site at Second Avenue in Brooklyn, New York (Site). The work was performed pursuant to a Voluntary Cleanup Agreement (VCA) between the United States Postal Service (USPS) and the New York State Department of Environmental Conservation (NYSDEC) and in accordance with the "Revised Remedial Work Plan" (Work Plan) dated March 20, 2002, which was prepared by AKRF Engineering, P.C. (AKRF) and approved by the NYSDEC. The approximate well locations are shown in Figure 1. Because the proposed Site building will be constructed up to the property boundary, a total of seventeen (17) wells were installed through the 12th Street sidewalk.

General Scope of Work Completed

The Work Plan specified the installation of twenty-eight (28) product recovery wells (RW-1 through RW-28) to a depth of 50 feet below land surface (bls) (deep wells) at a 25-foot spacing along the northwest and southwest perimeter of the Site and two (2) shallow wells in the southwest corner of the Site, near the adjacent Pathmark, screened above the meadow mat layer (i.e., peat layer), which was usually encountered at

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approximately 13 to 15 feet bls. In accordance with the Work Plan requirements to reduce the spacing between wells if product was observed in the drill cuttings, sixteen (16) additional deep wells (RW-29 through RW-44) were installed.

Because product was not observed in the drill cuttings of wells RW-23, RW-25 and RW-27, proposed wells RW-24, RW-26 and RW-28 were not installed, in accordance with the Work Plan, which allows an increase in the well spacing at locations where contamination is not observed during drilling. The removal of wells RW-24, RW-26 and RW-28 from the work scope was discussed in Roux Associates' April 22, 2002 Memorandum to the NYSDEC.

Because the peat layer was not encountered in the southwest corner of the Site between the Pathmark building and Gasholder No. 1, the two proposed shallow wells were not installed in that area. However, to capture any shallow free product present, wells RW-3, RW-4, RW-31 and RW-32 were completed with 35-foot long screens that extend from approximately ten to 45 feet bls. This work scope modification was approved by the NYSDEC.

At the NYSDEC's request, FC Gowanus agreed to install two other shallow product recovery wells near soil boring GH-31, which was advanced during the Hot Spot Delineation activities. Wells RW-1S and RW-2S were installed in the 12th Street sidewalk to satisfy NYSDEC's request (see Roux Associates' Hot Spot Delineation and Gasholder Characterization Results, April 26, 2002).

The following sections of this report provide a brief discussion of the drilling procedures, the well construction details, well development procedures, and the results of the weekly well monitoring and product recovery events that were performed during May 2002.

Drilling Procedures

Aquifer Drilling and Testing, Inc. (ADT), provided drilling services under subcontract to Roux Associates, using a hollow stem auger drill rig. Drilling was performed between March 18 and May 21, 2002. Prior to drilling, ADT constructed containment berms using wood and plastic to prevent soil and liquid from spilling onto uncontaminated surface fill. Split spoon samples were collected from each borehole and visually inspected by a Roux Associates' staff scientist for the presence of free product (i.e., coal tar) and lithology. Split spoon samples were collected from above the peat layer only to determine if free product was present before drilling into the peat. Each sample was also screened for volatile organic compounds (VOCs) using a photoionization detector (PID). The remainder of each borehole was logged from drill cuttings as they traveled up the

auger flights to the surface. Drill cuttings were placed in labeled and sealed 55-gallon drums for disposal at a later date. Lithologic descriptions, sample observations, and PID results are provided in the attached Well Construction Logs.

Well Construction

Once each borehole was advanced to the target depth (e.g., 50 feet), ADT constructed a well in the borehole. Each well was constructed of four-inch diameter schedule 40 polyvinyl chloride (PVC) riser pipe and 0.02-inch (i.e., 20-slot) slotted pipe (i.e., well screen). The deep wells were constructed with 25-foot long screens that extend from approximately 20 to 45 feet bls, except for wells RW-3, RW-4, RW-31 and RW-32, which were completed with longer screens that extend from approximately ten to 45 feet bls. Longer screens were used for these deep wells to capture shallow product instead of installing shallow wells for that purpose, because the peat layer was not observed in that area of the Site. A five-foot sump was attached to the bottom of each deep well to collect free product.

Shallow wells RW-1S and RW-2S were constructed above the peat layer with ten-foot screens that extend from approximately four to 14 feet bls and five to 15 feet bls, respectively. The sumps installed at the bottom of wells RW-1S and RW-2S were only two feet and one foot long, respectively, and extend into, but not completely through the peat layer.

After each well was installed, the annulus was filled with a No. 2 sand (i.e., 20-mesh sand) from the bottom of the sump to a minimum of two feet above the top of the screen followed by a minimum four-foot bentonite seal. The remainder of the annulus was filled with a cement/bentonite grout to approximately one foot bls. Because of the size constraints of the shallower wells, RW-1S and RW-2S have shorter bentonite seals and are sealed above the bentonite with cement only.

During drilling, heaving of the native formation materials (e.g., silt and sand) periodically occurred. As a result, the formation collapsed and filled a portion of the annular space between the well screen and the borehole wall in wells RW-16, RW-33, RW-35 and RW-37. Multiple attempts were made at re-drilling and constructing these wells, but because of the difficult drilling and recurring heaving, the wells were completed with the annular space partially filled with the native formation materials. The extent of the formation collapse is noted on the Well Construction Logs for each well.

The wells that were installed on the Site property were completed with a stand-up design protective steel casing. The sidewalk wells were completed with a bolt-down flush-

mount manhole and steel well box set in concrete. A locking watertight cap and padlock was installed on each well.

Well Development

Upon completion of their installation, all of the product recovery wells were vigorously surged and developed using a submersible pump until clear (non-turbid) water was produced or until at least five volumes of liquid were removed from the well. The water and product removed during development was contained in 55-gallon drums for later disposal by FC Gowanus.

Recovery Well Monitoring and Product Recovery

In accordance with the Work Plan, weekly well monitoring and product recovery was conducted on May 1, 7, 16, 23, 28 and 31, 2002. Prior to collecting any free product, liquid levels in each well were gauged using an electronic probe. Free product was manually collected using a bailer. The depth to water measurements and the amount of product recovered from each well is provided in Table 1. Table 2 provides a summary of the cumulative total amount of product recovered from each well during the period May 1 through May 31, 2002. Approximately 65 gallons of product have been recovered at the Site through May 31, 2002.

Traces of product (TP) are reported in Table 1 if coal tar was observed to be clinging to the bailer, but was not recoverable. Because the electronic probe was ineffective at accurately detecting free product and depth to water, free product thicknesses could not be measured and depth-to water measurements were not consistently obtained. Based on our experience and the experience of NYSDEC personnel, this is a common occurrence at coal tar-contaminated sites.

The volume of free product recovered was visually estimated while pouring the contents of the bailer (water and product) into a five-gallon bucket. The buckets were emptied into 55-gallon drums, which were sealed, labeled and stored onsite for disposal at a later date.

Monitoring and product recovery activities will continue to be performed weekly. Because the amount of product being recovered from wells RW-13 and RW-40 equals or exceeds the sump capacity (i.e., 3.25-gallons), these wells are currently being monitored twice per week, in accordance with the Work Plan. The results of the monitoring and product recovery activities will be reported in monthly progress reports.

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If you have any questions or require additional information, please call us at (631) 232-2600.

Sincerely,

ROUX ASSOCIATES, INC.

George a. har

George A. Tyers, C.P.G. Senior Hydrogeologist / Project Manager

Joseph D. Duminuco Vice President /

Principal Hydrogeologist

Attachments

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Lindsay McGrady, Lowes

Table 1. Summary of Product Recovery, Former MGP Site Second Avenue, Brooklyn, New York

Well	Monitoring Date	Donth To Water (Et bla)	Denduct Reflect (early
Designation	5/1/02	Depth To Water (Ft bls)	0.00
	5/7/02	2.12	0.00
RW-1S	5/16/02	2.12	0.00
K41-19	5/23/02	2.22	0.00
	5/28/02	2.11	0.00
	3/28/02	Total Product Recovered	0.00
· · · · · · · · · · · · · · · · · · ·			
	5/1/02	1.70	0.00
D.171 A.0	5/7/02	1.72	0.00
RW-2S	5/16/02	2.95	0.00
	5/23/02	-	0.00
·	5/28/02	1.95 Total Product Recovered	0.00 0.00
		Total Trouses According	0.00
<u> </u>	5/1/02	8.55	TP
	5/7/02	8.61	0.12
RW-1	5/16/02	9.42	0.00
	5/23/02	-	0.00
	5/28/02	8.79	ТР
		Total Product Recovered	0.12
	5/1/02	9.71	0.25
	5/7/02	9.95	0.12
RW-2	5/16/02	12,04	0.00
	5/23/02	-	TP
	5/28/02	9.69	TP
		Total Product Recovered	0.37
	5/1/02	10.62	0.09
	5/7/02	10.41	0.50
RW-3	5/16/02	10.37	
ICW-5	5/23/02	10.57	TP
	5/28/02	10.21	TP
	3126102	Total Product Recovered	0.59
·····			
	5/1/02	11.31	0.09
and the state of	5/7/02	10.47	TP
RW-4	5/16/02	10.47	TP
	5/23/02		ТР
	5/28/02	10.27	TP
		Total Product Recovered	0.09
	5/1/02	10.80	0.06
*	5/7/02	10.62	0.25
RW-5	5/16/02	10.63	TP
_	5/23/02	-	TP
	5/28/02	10.48	0.00
		Total Product Recovered	0.31

Table 1. Summary of Product Recovery, Former MGP Site Second Avenue, Brooklyn, New York

Well Designation	Monitoring Date	Depth To Water (Ft bls)	Product Bailed (99
	1 2410		Janes Danieu (Bu
	5/1/02	11.49	0.09
	5/7/02	11.29	TP
RW-6	5/16/02	11.36	TP
	5/23/02		TP
	5/28/02	11.15	0,00
	3/20/02	Total Product Recovered	0.09
	5/1/02	11.42	0.00
	5/7/02	11.21	0.00
RW-7	5/16/02	<u>-</u>	TP
	5/23/02	 	0.00
	5/28/02	11.06	0.00
	0,20,02	Total Product Recovered	0.00
<u> </u>			
<u> </u>	5/1/02	9.12	0.25
	5/7/02	9.95	0.50
RW-8	5/16/02	10.09	0.02
	5/23/02		TP
	5/28/02	9.91	0.02
	3720702	Total Product Recovered	0.79
	<u> </u>		
	5/1/02	10.60	1.25
	5/7/02	10.41	0.12
RW-9	5/16/02	10.71	0.02
	5/23/02	-	0.08
	5/28/02	9.35	0.19
		Total Product Recovered	1.66
		10th 170mot According	1.00
······································	5/1/02	9.78	1.75
	5/7/02	6.89	1.75
RW-10	5/16/02	14.34	2.00
1011-10	5/23/02	17.77	3.00
•	5/28/02	9.62	1,25
	3/26/02	Total Product Recovered	9.25
	······································	Total Trouble Recovered	
	5/1/02	12.30	1.50
	5/7/02	12.15	0.75
RW-11	5/16/02	11.60	0.75
IX 44 - 1 I	5/23/02	11.00	0.03
		12.17	
	5/28/02	Total Product Recovered	2.50 4.87
		1 olai Froduct Recovered	4.0/
	5/1/00	12.50	2.00
	5/1/02	12.35	2.00 0.25
			11.73
RW-12	5/7/02		
RW-12	5/16/02	12.39	0.06
RW-12			

Table 1. Summary of Product Recovery, Former MGP Site Second Avenue, Brooklyn, New York

RW-13 5/1/02 5/7/02 5/16/02 5/23/02 5/28/02 5/28/02 5/31/02 Total Pr.	o Water (Ft bls)	Product Bailed (gal
S/7/02 S/16/02 S/23/02 S/28/02 S/28/02 S/31/02 S/31/02 S/7/02 S/28/02 S/28/0		
RW-13 5/16/02 5/23/02 5/28/02 5/31/02	13.01	8.00
S/23/02 S/28/02 S/28/02 S/31/02 S/71/02 S/71	12.65	6.00
5/23/02 5/28/02 5/31/02	13.34	4.50
S/31/02 Total Pr.	-	6.50
S/1/02 S/7/02 RW-14 S/16/02 S/23/02 S/28/02 Total Pr.	13.08	4.00
S/1/02 S/7/02 S/7/02 S/23/02 S/28/02 Total Procession S/1/02 S/23/02 S/28/02	-	3.00
S/7/02 S/16/02 S/23/02 S/28/02 Total Processor S/1/02 S/23/02 S/28/02 Total Processor S/1/02 S/23/02 S/	roduct Recovered	32.00
S/7/02 S/23/02 S/23/02 S/28/02 Total Pr.	11.98	0.06
RW-14	11.87	0.00
5/23/02 5/28/02	12.91	0.02
5/28/02	12,91	0.02
S/1/02 S/7/02 RW-15 S/16/02 S/23/02 S/28/02 Total Pr.	12.07	0.03
S/1/02 S/7/02 RW-15 S/16/02 S/23/02 S/28/02 Total Pr.	roduct Recovered	0.15
S/7/02 S/16/02 S/23/02 S/28/02 Total Processor S/1/02 S/23/02 S/28/02 Total Processor S/16/02 S/23/02 S/23/02 S/23/02 S/23/02 S/23/02 S/23/02 S/28/02 Total Processor S/1/02 S/23/02 S/28/02 Total Processor S/1/02		
RW-15	6.71	0.50
5/23/02	6.65	0.02
5/28/02	7.00	0.01
S/1/02 S/7/02 RW-16 S/16/02 S/23/02 S/28/02 Total Property S/1/02 S/23/02 S/28/02 Total Property S/16/02 S/23/02 S/28/02 Total Property S/16/02 S/23/02 S/23/02 S/28/02 Total Property S/16/02 S/23/02 S/28/02 Total Property S/1/02 S/28/02 Total Property S/1/02 S/28/02 Total Property S/1/02 S	-	0.02
S/1/02 S/7/02 RW-16 S/16/02 S/23/02 S/28/02 Total Property S/1/02 S/23/02 S/28/02 Total Property S/16/02 S/23/02 S/28/02 Total Property S/16/02 S/23/02 S/23/02 S/23/02 S/28/02 Total Property S/1/02 S/23/02 S/28/02 Total Property S/1/02 S/	6.94	0.01
S/7/02 S/16/02 S/23/02 S/28/02 Total Pr.	roduct Recovered	0.56
S/7/02 S/16/02 S/23/02 S/28/02 Total Pr.	4.55	0.00
RW-16	4.45	0.00
5/23/02	4.69	TP .
5/28/02	-	0.01
S/1/02 S/7/02 RW-17 S/16/02 S/23/02 S/28/02 Total Property S/1/02 S/23/02 S/23/02 S/23/02 S/23/02 S/28/02 Total Property S/1/02 S/23/02 S/28/02 Total Property S/1/02 S/7/02 S/7/	4.53	0.01
5/7/02	roduct Recovered	0.02
5/7/02		
RW-17 5/16/02 5/23/02 5/28/02 Total Property States of the second states	6.61	TP
5/23/02 5/28/02 Total Property of the second of the seco	6.50	0.02
5/28/02 Total Property States of the state	7.06	TP
Total Production S/1/02 5/7/02 RW-18 5/16/02 5/23/02 5/28/02 Total Production 5/1/02 5/7/02		TP
S/1/02 5/7/02 RW-18 5/16/02 5/23/02 5/28/02 Total Pro- 5/1/02 5/7/02	6.80	TP
5/7/02 RW-18 5/16/02 5/23/02 5/28/02 Total Pro-	roduct Recovered	0.02
RW-18 5/16/02 5/23/02 5/28/02 Total Pro-	7.27	0.00
5/23/02 5/28/02 Total Pro 5/1/02 5/7/02	7.18	0.00
5/23/02 5/28/02 Total Pro 5/1/02 5/7/02	7.62	TP
5/28/02 Total Profile	-	ТР
5/1/02 5/7/02	7.51	ТР
5/7/02	oduct Recovered	0.00
5/7/02	6.68	0.00
	6.97	0.00
re out = 1 M	7.11	
RW-19 5/16/02		0.00
5/23/02	- 6 01	TP TP
5/28/02 Total Pu	6.81 coduct Recovered	0.00

Table 1. Summary of Product Recovery, Former MGP Site Second Avenue, Brooklyn, New York

Well Designation	Monitoring Date	Depth To Water (Ft bls)	Product Bailed (gal
<u> </u>		, (2 - 3)	(844
	5/1/02	6.92	0.00
	5/7/02	6.77	0.00
RW-20	5/16/02	7.50	TP
	5/23/02	-	0.01
	5/28/02	7.02	TP
	L	Total Product Recovered	0.01
	5/1/02	7.46	0.00
	5/7/02	7.35	0.00
RW-21	5/16/02	7.81	TP
	5/23/02	•	0.01
	5/28/02	7.65	0.01
		Total Product Recovered	0.02
· · · · · · · · · · · · · · · · · · ·	5/1/02	7.70	0.02
	5/7/02	8.29	0.02
RW-22	5/16/02	7.73	0.03 TP
K W -22			
	5/23/02	7,89	TP
	5/28/02	Total Product Recovered	0.02
		Total Product Recovered	0.09
	5/1/02	6.58	0.00
	5/7/02	6.51	0.00
RW-23	5/16/02	6.63	0.00
	5/23/02	-	0.00
	5/28/02	6.61	0.00
	<u> </u>	Total Product Recovered	0.00
·			
;	5/1/02	7.34	0.00
	5/7/02	7.22	0.00
RW-25	5/16/02	7.57	0.00
	5/23/02	<u>-</u>	0.00
	5/28/02	7.37	0.00
		Total Product Recovered	0.00
	5/1/02	7.17	0.00
		/.1/	
DW 27	5/7/02	7.22	0.00
RW-27	5/16/02	7.33	0.00
	5/23/02	715	0.00
	5/28/02	7.15	0.00
 _		Total Product Recovered	0.00
*	5/1/02	11.19	0.00
•	5/7/02	11.09	TP
RW-29	5/16/02	11.33	TP
	5/23/02	-	TP
	5/28/02	11.09	0.00
	1 7,20,02	Total Product Recovered	0.00

Table 1. Summary of Product Recovery, Former MGP Site Second Avenue, Brooklyn, New York

Well	Monitoring		
Designation	Date	Depth To Water (Ft bls)	
	5/7/02	10.82	1.00
RW-30	5/16/02	10.90	TP
	5/23/02	-	0.08
	5/28/02	10.79	TP
		Total Product Recovered	1.08
	5/7/02	10.22	TP
RW-31	5/16/02	10.20	TP
K W -31	5/23/02	-	TP
	5/28/02	10.04	TP
	\	Total Product Recovered	0.00
	5/7/02	10.01	* TP
	5/16/02	10.02	TP
RW-32	5/23/02	10.02	TP
	5/28/02	9.84	0.01
- · · · · · · · · · · · · · · · · · · ·	3120102	Total Product Recovered	0.01
		A COMP A LUMBOO ALDOUPEIGH	
	5/7/02	9.71	0.00
RW-33	5/16/02	9.10	0.00
	5/23/02	<u>-</u>	0.01
	5/28/02	9.36	TP
		Total Product Recovered	0.01
,	5/16/02	10.35	0.06
RW-34	5/23/02		TP
	5/28/02	10.39	TP
		Total Product Recovered	0.06
	5/16/02	9.60	TP
RW-35	5/23/02	-	0.08
	5/28/02	9.58	0.75
		Total Product Recovered	0.83
· ·	5/16/02	9.75	0.50
RW-36	5/23/02	7.113	0.05
2011 40	5/28/02	9.50	0.05
····,	J120102	Total Product Recovered	0.80
RW-37	5/23/02	-	0.00
	5/28/02	*	0.00
		Total Product Recovered	0.00
DIVIO	5/23/02	-	0.00
RW-38	5/28/02	11.92	0.06
	J	Total Product Recovered	0.06

Table 1. Summary of Product Recovery, Former MGP Site Second Avenue, Brooklyn, New York

Well	Monitoring		
Designation	Date	Depth To Water (Ft bls)	Product Bailed (gallons)
RW-39	5/23/02	-	0.00
IC VV -39	5/28/02	12.51	3.00
		Total Product Recovered	3.00
· · · · · · · · · · · · · · · · · · ·	5/22/02		0.00
DVV 40	5/23/02	-	0.00
RW-40	5/28/02	12.37	3.25
	5/31/02		1.50
		Total Product Recovered	4.75
	5/23/02	1 -	0.00
RW-41	5/28/02	7.05	0.00
	0,20,02	Total Product Recovered	
RW-42	5/23/02	-	0.00
1011-42	5/28/02	7.13	0.04
		Total Product Recovered	0.04
	5/23/02		L 0.00
RW-43		7.04	0.00
	5/28/02	7.04	TP
		Total Product Recovered	0.00
RW-44	5/23/02	-	0.00
. I√ YY -4+4	5/28/02	7.54	TP
· ±-14		Total Product Recovered	0.00

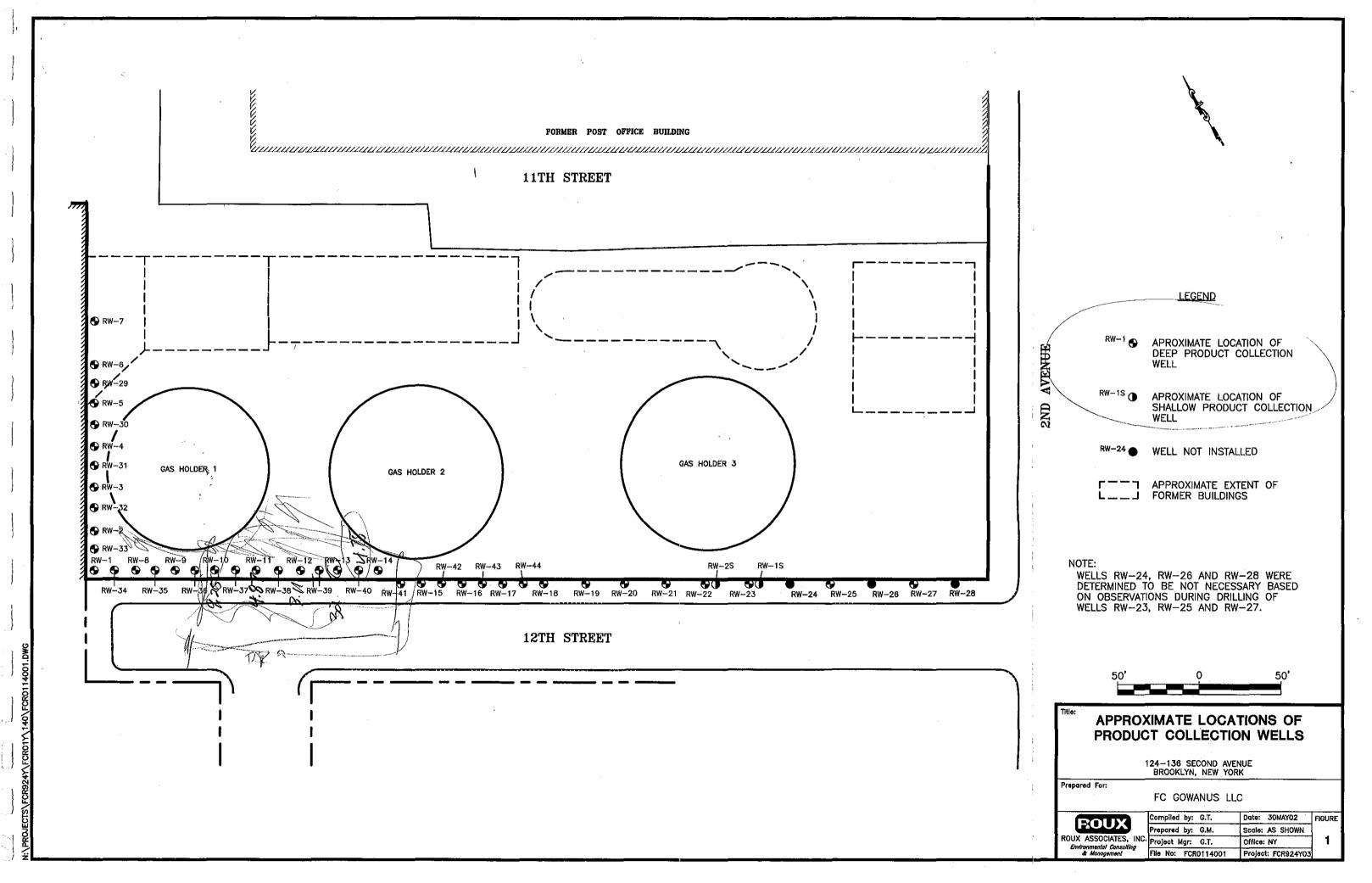
TP - Trace Product

Table 2. Total Product Recovered, May 1 Through May 31, 2002 Former Second Avenue MGP Site, Brooklyn, New York

	Well	Product Recovered
	Designation	(gallons)
	RW-1S	0
	RW-2S	0
	RW-1	0.12
	RW-2	0.37
	RW-3	0.59
	RW-4	0.09
•	RW-5	0.31
	RW-6	0.09
	RW-7	0
	RW-8	0.79
	RW-9	1.66
	RW-10	9.25
	RW-11	4.87
	RW-12	3:11
	RW-13	32.00
	RW-14	0.15
•	RW-15	0.56
•	RW-16	0.02
	RW-17	0.02
	RW-18	0
	RW-19	0
	RW-20	0.01
	RW-21	0.02
	RW-22	0.09
	RW-23	0
	RW-25	0
	RW-27	0
	RW-29	0
	RW-30	1.08
	RW-31	0
	RW-32	0.01
•	RW-33	0.01

Table 2. Total Product Recovered, May 1 Through May 31, 2002 Former Second Avenue MGP Site, Brooklyn, New York

Well	Product Recovered
Designation	(gallons)
RW-34	0.06
RW-35	0.83
RW-36	0.8
RW-37	0
RW-38	0.06
RW-39	3.00
RW-40	4.75
RW-41	0
RW-42	0.04
RW-43	0
RW-44	0
Total Product Recovered	64.76





ige ELL N			NO	RTHING		NSTRUCTION LOG EASTING			<u></u>
30 J===	RW-1			_		LOCATION			
	YOU FO		ue fors	ner MGP Si	to	LOCATION 124-136 2nd Avenue		4	
	VED BY	owan	<u>ua 1010</u> LO	GGED BY	1.5				
. Tye	ers		c.	Battista		Brooklyn, New York			
	IG CONTRAC			. 16		GEOGRAPHIC AREA			
quite	er Drilling IIT DIAMETER	o <u>lest</u> ?/TYPF	ing, Ind	c. / S. Miller HOLE DIAME	r rer	On Site Along 12th Street DRILLING EQUIPMENT/METHOD	SAMPLING	METHOD	START-FINISH DATE
.25-ir	n. / Auger		10-ir	nches	·		2" Split S		3/18/02-4/1/02
ASING	MAT./DIA,		SCRE	EN:					
<u>CH 4</u>	10 PVC / 4-		T	YPE Slotted	TOD OF '	AT. SCH 40 PVC TOTAL LENGTH 25. (ELL CASING TOP & BOTTOM SCRE	.0 DI	A. 4-inch	SLOT SIZE 20-Slot
LEVAT T.)	ION OF:	· Gi	KUUNU S	SURFACE	TOP OF W	IOP & BOTTOM SCRE	:EN (:	SW SURFACI	E GRAVEL PACK
a i	inch Locking			4-inch			-:		I IF 64
_{otn} ,Ste	el Protective Stand Pipe	$\bigvee =$	$\Rightarrow 1$	Locking Tes Well Plug	Giapnic	Visual Description	Blow Counts	PID Values	REMARKS
et	Juliu i ipo	7		TTORT IUg	Log	visual Description	per 6"	(ppm)	NEWANNO .
			حإرا	CEMENT	HHH	Brown fine to coarse SAND, some Gravel,			
		\`\`\	[XXX]		世世	trace Brick; dry to wet (fill)	[]	[
		***	****		HHH	·			
		***	\sim	- Cement/	四四			[
-		***	\sim	Bentonite	HHH				Strong odor
		***	\bowtie	Grout	ppp	Brown fine to coarse SAND, some Sllt, little			Strong odos
	*	***	\bowtie		HHH	Gravel, trace Brick; dry to wet (fill)		21.8	Sheen and strong odor
		~~~	~~	•	HHH	No recovery			
_				•	4444				
				- Bentonite - Chips	1444	Brown to dark brown fine to coarse Sand, and Gravel, little Silt, little Wood; wet (fill)		29.3	
				Onipa	MM		1	▲ \	Sheen and strong odor
					***	Brown to red fine to coarse SAND, some	\forall	13.7	
						Concrete; wet (fill)		r	Thickness of peat interval
-			+	 4-inch PVC Well Casing 	1 24 24	Green to grey PEAT; moist			interpreted from previous S
				vven Casing	- <u> </u>	Dark gray Silt and fine Sand, wet	┥		investigation
		l:::L	_ ∵					4.5	Character and a
		l: E	3 **/1						Strong odor
			∄ ી		$\mathbb{F} = \mathbb{I}$			[
						Dark gray Silt and fine Sand; wet			
			∄ઃં∤	and the second s				5.8	
			⇛兴	- 20-Slot PVC	[[
	· .	ĽΞ	∃ "∷I	Well Screen	[=54			[
-		ŀ∵≓	ᆿ`			Dark gray Silt and fine Sand, trace Gravel;		[[
		l : E	∃ :1			wet		10.4	
		[:::E	= 1					10.4	
		:::: E	3 1		H27-1				
			日 : [- #2 Sand	-3-3	Brown Silt and fine Sand; wet			
		i F			<u> </u>	Digini dik and nile gand, wet) · \		
		ΙŒ			<u> </u>				
		i E							Sheen and strong odor
_		E					.	[
-			日二日			Brown Silt and fine Sand, wet			
			$\exists : \exists$			•		79.4	
									Sheen and strong odor
			世紀		[<i>3</i>			
		: ; <u> </u>		,		Brown Silt and fine Sand; wet		[[Trace free product
	T-4=127		曲:1						moo product
				*					
_				- 5-foot PVC		·			
				Sump		Brown Silt and fine Sand; wet:			
				- Push on PVC	L			30.1	
				Well Cap					Bottom of well 47.5 feet bek
					⊨		1		land surface



& Management

1377 Motor Parkway Islandia, NY 11749 Telephone: 631-232-2600 Fax: 631-232-9898

WELL CONSTRUCTION LOG Page of 1 WELL NO. NORTHING EASTING RW-2 LOCATION 124-136 2nd Avenue PROJECT NO /NAME 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY

G. Tyers C. Battista Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / S. Miller On Site Along Pathmark Wall DRILL BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 6.25-in. / Auger Mobile Drill B-61 / HSA 10-inches 2" Split Spoon 3/21/02-3/29/02 CASING MAT./DIA. SCREEN SCH 40 PVC / 4-inch SLOT SIZE 20-Slot TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch TOP OF WELL CASING **ELEVATION OF:** GROUND SURFACE TOP & BOTTOM SCREEN GW SURFACE **GRAVEL PACK** #2 (FT.) 6-inch Locking 4-inch Depth, Steel Protective Locking Test PID Blow Graphic Stand Pipe Visual Description Well Plug Counts Values REMARKS feet Log рег 6" (ppm) Brown fine to coarse SAND, little Gravel, - CEMENT trace Silt, trace Brick, trace Coal Fragments; dry to wet (fill) 5 Cement/ Bentonite 10 Brown fine to coarse SAND, trace Silt, 0.3 trace Gravel; wet (fill) Bentonite Brown fine to medium SAND, trace Silt, . . Chips 0.3 trace Gravel; wet (fill) Brown fine to medium SAND, trace Silt, 15 4-inch PVC 0.6 trace Gravel; wet (fill) Well Casing . . Brown fine to medium SAND, trace Silt, 0.1 trace Gravel, trace Wood; wet (fill) Brown fine to medium SAND, trace Silt, 0.1 trace Gravel, trace Wood; wet (fill) 20 Brown Silt and fine Sand, little coarse Strong odor Gravel: wet - -20-Slot PVC 126 Well Screen 25 25 Brown Silt and fine Sand, little Gravel; wet Strong oder 303 - -30 30 Brown Silt and fine Sand, little Gravel; wet Trace free product #2 Sand 493 274 35 Brown Silt and fine Sand, little Gravel; wet Free product 311 6/1 40 40 Brown Silt and fine Sand, little Gravel; wet Free product 893 45 45 5-foot PVC Dark gray to brown fine SAND, little Silt; Sump Free product >2000 ush on PVC Well Cap Bottom of well 47.5 feet below land surface 50 50



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Environmental Consulting
& Management

ELL NO. RW-3		NO	RTHING		EASTING				
ROJECT NO./NAME 2401Y03 / FC G	OM 2011		or MCD S		LOCATION 124-136 2nd Avenue				
PROVED BY	owanu.	LO	GGED BY						
. Tyers RILLING CONTRACT			Moss		Brooklyn, New York GEOGRAPHIC AREA		.,	*	
auifer Drillina 8	k Testir	ıg, İnd	c. / L. Adan	ns	On Site Along Pathmark Wa	II.			
RILL BIT DIAMETER	/TYPE	BORE	HOLE DIAME	TER	DRILLING EQUIPMENT/METHOD	SAMPLING		START-FINISH DATE	
25-in. / Auger ASING MAT./DIA.		SCRE	nches EN:		CME-75 / HSA	2" Split	apoon	3/21/02-3/28/02	
CH 40 PVC / 4-i EVATION OF:	nch	T	YPE Slotte	TOD OF W	AT. SCH 40 PVC TOTAL LENGTH :		IA. 4-inch GW SURFAC	SLOT SIZE 20-Slot E GRAVEL PACK	_
T.)	GNU	ב טאט כ	OUNFACE	TOP OF W	I I I I I I I I I I I I I I I I I I I	INCEIA	GW BURFAC	#2	
6-inch Locking Steel Protective		7	4-inch Locking Te	st		Blow	PID		
et Stand Pipe) F	7	Well Plug	Graphic Log	Visual Description	Counts per 6"	Values (ppm)	REMARKS	
			CEMEN	Tuul	Brown fine to coarse SAND, trace Gravel,		(ppin)	F.	
]	\sim		- Cement/	H	trace Brick; wet at 5 (fill)	1			
-	***		Bentonite Grout	HHH.					
- • [Citati	m					
 . -			- Bentonite	加加					
-			Chips	四四					
			- 4-inch PVC	四出	•				
<u>-</u> ,			Well Casing	1777	Duran Garata areas CAND William Co		Ш		
-				四	Brown fine to coarse SAND, little Gravel, little Brick, trace Sllt; wet (fill)		0.0		
- -				14441	Brown fine to coarse SAND, little Gravel,		0.0		
-				HHH	little Brick, trace Sllt; wet (fill) Brown fine to coarse SAND, trace Gravel,		0.0		
<u>. </u>		: :		THE I	trace Silt; wet (fill)		1.4	·	
- _			,	1444	Brown fine to medium SAND, trace Silt,			Strong odor and trace free	
-				M	trace Gravel; wet (fill) Brown fine to medium SAND, trace Silt,		5.7	product	
-)				m	trace Gravel; wet (fill)		1.4	Trace free product	
- -					Brown fine to coarse SAND, little Silt; wet			Odor	
-			- 20-Stot PVC				27.4		
-			Well Screen					:	
5					Parasia fina da angara BAMD, Hilla Olli dana	_		 	
-				<u> </u>	Brown fine to coarse SAND, little Silt, trac Gravel; wet	e		Odor	
_			•				15.1		
- 1			- #2 Sand						
)		<u> </u>	. '		Brown fine to coarse SAND, little Silt, trac	e		Free product	
- -					Gravel; wet		152		
						-		9	
·									
_ -					Brown SILT, some fine Sand, trace coarse Sand; wet	Đ		Odor and free product	
-					Caria, For		98.1	· ·	
-				7 - 7					
<u>) </u>					Brown fine SAND, little Silt, trace Gravel;			04	
				10-0	wet			Odor and free product	
<u> </u>]: ::					237		
		1							
<u>5</u>					Brown fine SAND, little Silt, trace Gravel;			Free product	
_					wet		1681		
-	- -		- 5-foot PVC Sump						
		4		p			1 1 1	Ī	



ige 1 of	1		VVE	LL CU	NSTRUCTION LOG				
ELL NO.		NC	RTHING		EASTING				-
RÓJECT NO./NAME					LOCATION				_
2401Y03 / FC G	<u>owanu</u>		ner MGP Si GGED BY	te	124-136 2nd Avenue				
i. Tyers			Moss		Brooklyn, New York				
RILLING CONTRAC			- 11 4-1		GEOGRAPHIC AREA				
quifer Drilling a	<u>& Lestii</u> VTYPE	ng, In Bori	C. / L. Adan HOLE DIAME	1 S TER	On Site Along Pathmark Wall DRILLING EQUIPMENT/METHOD	SAMPLING N	ETHOD	START-FINISH DATE	_
.25-in. / Auger			nches		CME-75 / HSA	2" Split Sp	ooon	3/21/02-3/28/02	
ASING MAT./DIA. CH 40 PVC / 4-	inch	SCRE	EN: YPE Slotte d	l Aá	AT. SCH 40 PVC TOTAL LENGTH 35	50 DIA	. 4-inch	SLOT SIZE 20-Slot	
LEVATION OF:			SURFACE		ELL CASING TOP & BOTTOM SCRE		N SURFACE	GRAVEL PACK	_
T.) 6-Inch Locking \			4-inch					#2	
Steel Protective		7	Locking Tes Well Plug	it Graphic	Viewal Departmen	Blow	PID	DEMARKS	
eet Stand Pipe	7 [T L	vveii Plug	Log	Visual Description	Counts per 6*	Values (ppm)	REMARKS	
<u>.</u>			CEMENT	HHH	Brown fine to coarse SAND, trace Brick, trace Silt, trace Gravel; wet at 5 (fill)				
-	***	***	- Cement/	HH	trace ont, trace Graver, wet at 5 (fill)			÷ .	
- '	***	\bowtie	 Bentonite Grout 	四四			1 1		
<u>-</u>				1444					
			- Bentonite	HHH					
-			Chips	中加				•	
-				HHH	·			•	
<u>.</u>			 4-inch PVC Well Casing 	1		إ	U I		
-		-		出出	Brown fine to coarse SAND, trace Brick, trace Silt, trace Gravel; wet (fill)		0.1		
		∄ :			Brown fine to coarse SAND, trace Brick,			Odor	
- -		=		HHH	trace Silt, trace Gravel; wet (fill)	1	1.6		
<u> </u>		∄ ∷ [1	Brown fine to coarse SAND, trace Brick, trace Silt, trace Gravel; wet (fill)		1.6	Odor .	
-				m	Brown fine to coarse SAND, trace Brick,			Slight ador	
-		∄ :		HHH.	trace Silt, trace Gravel; wet (fill)		0.9		
-		∄ :		HHH	Brown fine to medium SAND, trace Gravel,		1.9		
<u>) </u>	:	∄ :		HHH	trace Silt, wet		1.9		
-				mm	Brown fine to medium SAND, trace Gravel; wet (fill)		4.7	Black staining and strong	
-		=	 20-Stot PVC Well Screen 	\overline{m}	Gray fine SAND, little Wood; wet (fill) Brown fine to coarse SAND, little Slit, trace	✓ If	Π · k	Odor	
-	3 =				Gravel; wet		26.8		
<u>5</u> .		1			Brown fine to coarse SAND, some Slit,	·		North mad trans from mandriat	
-		∄ ∷		-::	trace Gravel; wet		l I	Odor and trace free product	
		∄ ::					7.2		
•	ं े ⊨	∄ ∷ I	- #2 Sand						
!]::::			Brown fine to coarse SAND, some Slit,			· Odor and trace free product	
•		∄ :			trace Gravel; wet		ii - I	odor and trace free product	
]	* .				5.6		
		∄ ∷						•	
_		∄ :			Brown fine to coarse SAND, some Sllt,			Odor and trace free product	
] [trace Gravel; wet	-		·	
-		3					14.9		
'-		∄ :			Brown fine to coarse SAND, some Slit,			ree product	
•		∄ :			trace Gravel; wet		il I		
		1					35.1		
<u>.</u> .]						•	
5_					Brown fine to coarse SAND, some Sllt,		F	ree product	
• . 					trace Gravel; wet		87.4		
-	-		- 5-foot PVC Sump				""	7.	
~,									
)		= 1:: '	 Push on PVC 	1					



Page 1 of 1 WELL CONSTRUCTION LOG

age VELL N	1	of					LL CC	INSTRUCTION LOG				
VELL		V-5			N	ORTHING	4	EASTING				
	CT NC	./NAM						LOCATION 124-136 2nd Avenue				
2401	VED E	/ FC	Gowa	anu:		mer MGP Si	te	124-136 2nd Avenue				
. Tye	ers				C	. Battista		Brooklyn, New York			•	
		NTRA			LER			GEOGRAPHIC AREA				
quite Ril I f	er Dr	illing METE	R/TYP	estir F	ig, ir Bos	nc. / S. Miller REHOLE DIAME	TER	On Site Along Pathmark Wal	SAMPLING	METHOD	START-FINISH DATE	_
		uger		_		inches		Mobile Drill B-61 / HSA	2" Split S		3/21/02-3/27/02	
ASING	3 MAT	./DIA.			SCR	REEN:						_
	TION C	/C / 4	-inch			TYPE Slotted SURFACE		AT. SCH 40 PVC TOTAL LENGTH 2 ELL CASING TOP & BOTTOM SCR	5.0 DI	A. 4-inch SW SURFAC	SLOT SIZE 20-SIO E GRAVEL PACK	<u>t</u>
T.)					,,,,	001117102		1		344 GOINI AG	#2	
6 St	-inch L	ocking tective	\			4-inch Locking Tes	+		Blow	PID		
pih "' el	Stan	d Pipe	Α,			Well Plug	Graphic Log	Visual Description.	Counts	Values	REMARKS	
	<u> </u>						 	Brown coarse to fine SAND, trace Gravel.	per 6*	(ppm)		
•		۷.,	**	1	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	CEMENT	m	trace Brick, trace Silt; dry to wet (fill)				
•							时 出	<u> </u>				
-			***	1	***	,	HHH			1		
			***	1	***	1	四四				Ţ	
			***	1	***	- Cement/	FFFF					
			***	1	***	Bentonite Grout	HH			1		
			***	1	***	1	四四					
_			***	1	XX	4-inch PVC	HHH			U		
			***	1	***	Well Casing	FFFH	Brown fine SAND, trace Silt, trace Gravel; wet (fill)	-	0.0		
			<u>~~</u>	1	~~	1 .	M	Brown fine SAND, trace Silt, trace Gravel,	-			
							四四	wet (fill)		3.3		
						 Bentonite Chips 	HHH	Brown fine SAND, little Silt, trace Gravel;	1	V	Black staining	
-				Į			HHH	wet (fill)		9.5		
				1			444	No recovery		Y		
					: ::	,	77 77 7	Green to gray Peat and Clay, trace Sand; wet		.	Thickness of paid later 1	
		. 2]			5 50 50	·		14.6	Thickness of peat interval interpreted from previous	Sit
_							11111111111	Brown fine to coarse SAND, little Silt, little			investigation Strong odor	
				E		1		Gravel; wet	'	2.6	Onorig Outl	
] . 				.]	2.0		
									-			
-				E			<u> </u>	Brown fine to coarse SAND, some Silt; wet			Strong odor	
					;: ·;	-						
			19			20-Slot PVC				1.7		
						Well Screen						
-		•	1.0	E				Brown fine to coarse SAND, some Silt,			Strong odor	
		•	, , ,	E		:		trace Gravel; wet			onong odol	
	-					- #2 Sand				106		
						TE SAIN						
_				\equiv			<u> </u>	Brown fine to coarse SAND, some Silt,			Tenna fena	
								trace Gravel; wet			Trace free product	
		•				;	<u> </u>			134		
٠					:		<u> </u>					
-					17			B			_	
							43 ÷3	Brown fine to coarse SAND, some Silt; wet			Free product	
٠								· · · · · · · · · · · · · · · · · · ·		281		
											•	
_			15.5		14		المنهادي بنساد					
	•					<u> </u>		Brown Silt and fine Sand; wet		1	Odor and free product	
						5 6-1 000				375	•	
						5-foot PVC Sump	<u>. –</u>					
_			· · ·			Push on PVC						
-						Well Cap	 				Bottom of well 50 feet belo	w
						•				•	land surface ,	_



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Environmental Consulting & Management

VORILLER Sesting, In PE BOR 10- SCR	mer MGP Si DGGED BY . MOSS nc. / L. Adam EHOLE DIAME inches EEN: TYPE Slotted SURFACE	1S TER	LOCATION 124-136 2nd Avenue Brooklyn, New York GEOGRAPHIC AREA On Site Along Pathmark Wall DRILLING EQUIPMENT/METHOD CME-75 / HSA AT. SCH 40 PVC TOTAL LENGTH 25 ELL CASING TOP & BOTTOM SCR	SAMPLING 2" Split S		START-FINISH DATE 3/21/02-3/25/02
VORILLER Sesting, In PE BOR 10- SCR	DGGED BY . Moss IC. / L. Adam EHOLE DIAME Inches EEN: TYPE Slotted SURFACE 4-Inch Locking Tes	1S TER	Brooklyn, New York GEOGRAPHIC AREA On Site Along Pathmark Wall DRILLING EQUIPMENT/METHOD CME-75 / HSA AT SCH 40 PVC TOTAL LENGTH 25	2" Split S		I
VDRILLER Sesting, In PE BOR 10- SCR	. Moss nc. / L. Adam EHOLE DIAME Inches EEN: TYPE Slotted SURFACE 4-Inch Locking Tes	TER MA	GEOGRAPHIC AREA On Site Along Pathmark Wall DRILLING EQUIPMENT/METHOD CME-75 / HSA AT SCH 40 PVC TOTAL LENGTH 25	2" Split S		I
esting, In PE BOR 10-I SCR	EHOLE DIAME Inches EEN: TYPE Slotted SURFACE 4-inch Locking Tes	TER MA	GEOGRAPHIC AREA On Site Along Pathmark Wall DRILLING EQUIPMENT/METHOD CME-75 / HSA AT SCH 40 PVC TOTAL LENGTH 25	2" Split S		I
PE BOR 10-I SCR	EHOLE DIAME Inches EEN: TYPE Slotted SURFACE 4-inch Locking Tes	TER MA	DRILLING EQUIPMENT/METHOD CME-75 / HSA T. SCH 40 PVC TOTAL LENGTH 25	2" Split S		I
10-l SCR h	Inches EEN: TYPE Slotted SURFACE 4-Inch Locking Tes	l MA	CME-75 / HSA	2" Split S		I
SCR h	EEN: TYPE Slotted SURFACE 4-Inch Locking Tes	I MA TOP OF WE	AT. SCH 40 PVC TOTAL LENGTH 25		росп	DIM HOLDE
h GROUND	SURFACE 4-Inch Locking Tes	TOP OF WE		· .		
GROUND	4-Inch Locking Tes	TOP OF WE	ELL CASING TOP & BUTTOM SCRI	2.U DI/	A. 4-inch	SLOT SIZE 20-Slot
	Locking Tes		1	EEN G	W SURFAC	E GRAVEL PACK #2
	Locking Tes Well Pluo		· · · · · · · · · · · · · · · · · · ·			1174
		Ciapino	Visual Description	Blow Counts	PID Values	REMARKS
		Log .	7.00d. 000011p.11011	per 6"	(ppm)	
N 122	CEMENT		Brown fine to coarse SAND, trace Gravel,			
y 1	1	mm.	trace Brick, trace Silt; dry to wet (fill)			
	<u> </u>	14444		[. ,]	1	
y Kiri	1	mm .				
ÿ <u>`````</u>		FFF44		.	 • •	
y Ki		EEEE I				
y Kiri	Bentonite					
y (***)	Grout	HHH				
y Ky	4-inch PVC	4444	Province CANID Ettle City to a Color		1.6	01151.151.1
y (***	Well Casing				Y	Odor and Black Staining
y 🗯	,	0	• •		7.3	
y 🗯]	1	Sand; moist		XI	Thickness of peat interval
					5.9	interpreted from previous S
	- Replenite		Fine SAND, trace Gravel, trace Silt; wet	_	3 1	investigation Black staining
	- Berkonke Chips					Odor
	ļ ·					
				.	1	
			Gray fine SAND, little Siit, trace Grayel wet		1.9	Black staining
			, mas and mass are the mass		1	Cauch Gairing
					 	Odor
	1	<u>-</u> -				
	`	<u> </u>	Crowfine CAND Hits Off Access		4.7	
			Gray line SAND, little Silt, trace Gravel; wet	1		Slight Odor
			•			
	20-Slot PVC Well Screen				¶ . ;	
				.	450	
			Grey SILT, Some fine Sand; wet	1 .	156	Odor
		L — <u> </u>				
]	- <u>-</u> -		.		
	- #2 Sand					
			Brown to green fine SAND, some Silt; wet		350	Odor
		<u> </u>				
		<u> </u>	Brown to green fine SAND, some Silts		1254	Odes
		<u> </u>	brown to green line dainb, some siit; wet			Odor
		├				
					4904	
			Brown to green fine SAND, some Silt; wet	.	1824	Odor
	'			.		
	→ 5-fool PVC Sump					
	Push on PVC Well Cap	L			A .	Bottom of well 50 feet below
		- #2 Sand Grout 4-Inch PVC Well Casing Bentonite Chips 20-Slot PVC Well Screen	Bentonite Grout 4-inch PVC Well Casing Bentonite Chips 20-Slot PVC Well Screen #2 Sand - #2 Sand Push on PVC Push on PVC	Bentonite Grout 4-inch PVC Well Casing Green to gray Peat and Clay, trace brown Sand; moist Fine SAND, trace Gravel, trace Silt; wet Gray fine SAND, little Silt, trace Gravel; wet Brown to green fine SAND, some Silt; wet	Bentonite Grout 4-inch PVC Well Casing Well Casing Well Casing Well Casing Fine SAND, little Silt, trace Brick; wet (fill) Green to gray Peat and Clay, trace brown Sand; moist Fine SAND, trace Gravel, trace Silt; wet Gray fine SAND, little Silt, trace Gravel; wet Gray fine SAND, little Silt, trace Gravel; wet Gray fine SAND, little Silt, trace Gravel; wet Brown to green fine SAND, some Silt; wet	Bentonite Grout 4-Inch PVC Well Casing 4-Inch PVC Well Casing Green to gray Peat and Clay, trace brown Sand; moist Fine SAND, trace Gravel, trace Silt; wet Gray fine SAND, little Silt, trace Gravel; wet Gray fine SAND, little Silt, trace Gravel; wet 4.7 Gray fine SAND, little Silt, trace Gravel; wet Gray fine SAND, little Silt, trace Gravel; wet 4.7 Gray fine SAND, little Silt, trace Gravel; wet 4.7 Brown to green fine SAND, some Silt; wet Brown to green fine SAND, some Silt; wet 5-fool PVC Sump Push on PVC Brown to green fine SAND, some Silt; wet 1824



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Environmental Consulting
& Management

1377 Motor Parkway Islandia, NY 11749 Telephone: 631-232-2600 Fax: 631-232-9898

Page		of	1			VVE	LL CC	NS	RUC	FION LOG	i					
WELL					NO	RTHING		ĘΕ	ASTING		-					•
DDC	JECT NO	W-7	=	•			·		OCATION							
				niic	forn	ner MGP Si	to	12	24-136 2nd	Avenue						
APPR	ROVED	3Y		IIUS		GGED BY				, •						
	yers				C.	Battista		В	rooklyn, N	ew York						
	LING CO								EOGRAPHIC /							
Aqu	ifer Di	rilling	& Tes	<u>stin</u>	g, Inc	C. / S. Mille HOLE DIAME	<u>r </u>		n Site Alor	ng Pathmark Wa	all	DI INIC	METHOD		START-FINISH DATE	
	i-in. / A		rv i tre	=		:note biawe iches	IER			B-61 / HSA			poon		3/21/02-3/25/02	
	NG MAT				SCRE				IODIIO DIIII	D-01717070	<u> </u>	VIII. C	poon		OIL HOL GILGIOL	
	1 40 P					YPE Slotted	l v	лат. S	CH 40 PVC	TOTAL LENGTH	25.0		A. 4-incl		SLOT SIZE 20-Slot	:
	ATION	OF:	(GRO	OUND S	SURFACE	TOP OF W	VELL C	ASING	TOP & BOTTOM SO	CREEN	(SW SURFA	ACE	GRAVEL PACK	
(FT.)	A 1 . 1 . 1	ocking				4-inch				<u> 1</u>				i	#2	
Denth	Steel Pro	tective	\		$ \nearrow $	Locking Tes	st Graphic					Blow	PID		•	
feet	Star	nd Pipe	ן נ		ſĿ	Well Plug	Log	,	Visual D	escription		ounts er 6*	Value (ppm)		REMARKS	
			7		"	CEMENT	(<u>)</u>	Brow	n fine to coars	e SAND, trace Grave			(ppin)			
			\mathbb{K}		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	CEMEN	HH			lt; dry to wet (fill)	-"				*	- 1
					***										•	- 1
						•	HHH							-	•	
5	•		\}		\		partor							-		_5
			****			- Cement/	HHH			•	-			-		
			***			Bentonițe	四四									
			****			Grout		No ге	covery				₩ .			
10			***		\approx	4 to 25 50 75	HHH									10
						 4-inch PVC Well Casing 	177771		SAND, some C	Gravel, trace Silt; wet	t l		0.7	Bla	ack staining	
	•						4444	(fill)					1.4	- [
	•		***					Brow	n fine SAND, li	ttle Silt; wet (fill)			Y '	Bla	ack staining	
1							mm	Brown	n fina SANO II	ttle Silt; wet (fill)			1.9	Oc	dor and black staining	
15				•		 Bentonite Chips 	222		n to gray Peat				7.3	ام	dor	15
						Opo	12 34 34	0,00	,, g, ,	0.0,,			Ti		ickness of peat interval	
										•				int	erpreted from previous S	Site 1
	•									e SAND, some Silt,				linv	vestigation	
20					: ::		- : -		Gravel; wet				10.2			20
			1::1						n fine to coars Gravel; wet	e SAND, some Silt,				00	dor	
			: :									-				
				_					•							
25		•	· · . [] 	:	-						44.7	ľ		25
										e SAND, some Silt,			11.7	00	or	
ļ			: : :	=	! :::			trace	Gravel; wet							
						- 20-Slot PVC										
						Well Screen										
30	•				· · :	٠.	 	No re	covery							30
1				=	}			-	•							
			[]	=	 			:								[]
1						- #2 Sand].				٠	.]
35	•		[{		FINE FINE	Dos.	Groufing to	adium CAND			27.1	}		35
ļ						•	F2 - 7	Silt; v		edium SAND, some						
ğ - ·							1747	•			İ					
011/0														-	*	- 1
40							L						21.0	1	•	40
<u>ځا </u>							<u> </u>		Gray fine to m ittle Gravel; we	edium SAND, some			21.0	00	dor	
2			:					ont, II	ilile Glavel, We	•			1			
		•	[*							. }
1 45							[4									45
*							7474	Dark	gray Silt and fi	ne Sand; wet			30.6	Sh	neen and odor	7
2					<u> </u>								6			- 1
				_		5-foot PVC				.*				1	•	-]
₫ 			[::]			Sump	F							.		
50 50						- Push on PVC Well Cap				·····	:		L I LI	 	attom of wall EA fact before	50
3					11.	men cap					**				ottom of well 50 feet below and surface	44
ـــــا ۵																



& Management WELL CONSTRUCTION LOG Page of 1 WELL NO. NORTHING EASTING RW-8 PROJECT NO./NAME LOCATION 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY G. Tyers C. Battista Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aguifer Drilling & Testing, Inc. / S. Miller
DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER On Site Along 12th Street DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 6.25-in. / Auger 10-inches Mobile Drill B-61 / H\$A 2" Split Spoon 3/22/02-4/2/02 CASING MAT./DIA. SCREEN: SLOT SIZE 20-Slot GRAVEL PACK SCH 40 PVC / 4-inch TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch TOP & BOTTOM SCREEN TOP OF WELL CASING **ELEVATION OF:** GROUND SURFACE **GW SURFACE** #2 (FT.) 6-inch Locking 4-inch Depth Steel Protective Locking Test Well Plug PID Blow Graphic Stand Pipe Visual Description Values REMARKS Counts feet Loa per 6" (ppm) Brown fine to coarse fine SAND, trace CEMENT Gravel, trace Brick, trace Silt; dry to wet (fill) 5 Cement/ Bentonite Grout - -10 10 4-inch PVC Brown fine to coarse SAND, trace silt, trace Well Casing concrete; wet (fill) Black staining and trace free product Brown fine to medium SAND, trace Silt; wet (fill) Brown PEAT; wet Bentonite Thickness of peat interval 15 Chips 15 interpreted from previous Site investigation Brown fine to coarse SAND, little Silt, trace 38.5 Gravel: wet 20 Strong odor and trace free 20 Brown fine to coarse SAND, little Silt: wet product Slight odor and Sheen 17.1 - -25 25 Brown fine to coarse SAND, little Silt, trace Slight odor and Sheen Gravel; wet 0.0 20-Slot PVC Well Screen 30 30 Brown to dark gray fine to medium SAND, Odor some Silt, little Clay; wet 333 #2 Sand 35 35 Brown to dark gray fine to medium SAND, some Silt, little Clay; wet Odor 235 641 40 40 Dark gray to brown fine SAND, little Silt; Odor wet 427 9 45 45 Dark gray to brown fine SAND, little Silt; Odor 5-foot PVC 236 Sump Push on PVC 50 Bottom of well 49.5 feet below 50 Well Cap

land surface



ROUX ASSOCIATES, INC.

Environmental Consulting
& Management

age 1 of /ELL NO		NORTHING		NSTRUCTION LOG EASTING				_
RW-9 ROJECT NO./NAME		1		LOCATION				
2401Y03 / FC G			ite	124-136 2nd Avenue	•			
PPROVED BY		LOGGED BY		Bundlehm Nam Yark				
6. Tyers RILLING CONTRAC	TOR/DRILL	D. Moss ER		Brooklyn, New York GEOGRAPHIC AREA				
quifer Drilling	& Testing	g, Inc. / L. Adar	ns	On Site Along 12th Street				
RILL BIT DIAMETER	VTYPE	BOREHOLE DIAME	TER	DRILLING EQUIPMENT/METHOD	SAMPLING M		START-FINISH DATE	
.25-in. / Auger ASING MAT./DIA.		10-inches SCREEN:		CME-75 / HSA	2" Split Sp	oon	3/22/02-4/2/02	
CH 40 PVC / 4- LEVATION OF: T.)		TYPE Slotted JND SURFACE		AT. SCH 40 PVC TOTAL LENGTH 2: ELL CASING TOP & BOTTOM SCR:		4-inch V SURFACE	SLOT SIZE 20-Slot GRAVEL PACK #2	-
6-inch Locking \ Steel Protective pth, Stand Pipe eet	VIII	4-inch Locking Te Well Plug	st Graphic Log	Visual Description	Blow Counts per 6*	PID Values	REMARKS	
		CEMEN		Brown fine to coarse SAND, trace Gravel,	per 6	(ppm)		
	XX	A CLIVIEN	HHH	trace Brick, trace Silt; dry to wet (fill)				
- .	XXX	\approx	THAT!					
. · · · · ·	XXX	\approx	FTH		·			
<u>-</u>	XXX	\approx	HHH					
-	XXX	Cement/	四四					-
-		Bentonite Grout	1444					
- -			四四	•				
<u>) </u>	 	4-inch PVC	1444	Provin MOODs 1994 (511)		Ų ļ		
-	~~ ∕	Well Casing	四四	Brown WOOD; wet (fill)		12Ó	Free product	
-		<u>~~</u>		Brown fine SAND, little Silt, trace Gravel;) ·	Black staining	
-			HHH	wet (fill)		1 180 1	Odor and free product	
		- Bentonite	14441	Green to tan fine to medium SAND, little	T N	109	•	
-		Chips	四四	Silt; wet (fill)		109	Trace free product	
-		4.44	HHH	Grann to brown fine CAND acres Cill	<u> </u>) ·	***	
			四四	Green to brown fine SAND, some Silt, trace Peat; wet (fill)	- [57.6	•	
Ď			<u> </u>	Brown PEAT; moist	-	(·		
<u>-</u>			1 34 34		· /1		Thickness of peat interval	
-				<u> </u>		! _.	interpreted from previous Si investigation	it
_			ب ہ	Black fine to coarse SAND, little Gravel; wet			Odor and free product	
-			. O.					
<u>i. </u>			P = \$	Black fine to coarse SAND, some Silt, trace	[]		Black staining	
-				Gravel; wet]]	Sidest draining .	
- _ ··		20-Slot BVC	H	:	.	28.5	Trace free product	
-		Well Screen						
<u>) </u>				Riack to gray Sil T little fine Seed wat		-	Diant statut	
-	: : ==			Black to gray SILT, little fine Sand; wet			Black staining	
-						66.8	Odor and trace free product	t
		#2 Sand					: 	
						[
				Brown Silt and fine Sand, trace coarse Sand; wet			Odor and sheen	
					1	28.2		
-								
·.				•				
	; ; ; ; ; ; 			Brown Silt and fine Sand, trace coarse			Odor and sheen	
- :			_ 	Sand, wet		19.7		
-								
·								
-				Brown Silt and fine Sand, trace coarse			Odor and sheen	
-		5-foot PVC		Sand; wet		27.1		
		Sumo			•	21.1	•	
		4	<u> -</u>		1 1	1 1		
;	. : : 	Push on PVC			19	1	the state of the s	



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1377 Motor Parkway Islandia, NY 11749 Telephone: 631-232-2600 Fax: 631-232-9898

age 1 of	1	W	ELL CO	NSTRUCTION LOG				
WELL NO. RW-10		NORTHING		EASTING				
PROJECT NO./NAM 92401Y03 / FC		former MGP 3	Site	LOCATION 124-136 2nd Avenue				
APPROVED BY G. Tyers		LOGGED BY R. Kovacs		Brookhyn Novy York				
DRILLING CONTRA		LER		Brooklyn, New York GEOGRAPHIC AREA				
Aquifer Drilling DRILL BIT DIAMETE	& Testin	ig, Inc. / L. Ada	ms ETED	On Site Along 12th Street DRILLING EQUIPMENT/METHOD	SAMPLING N	JETHAN	START-FINISH DATE	
3.25-in. / Auger		10-inches	LICK .		2" Split S		3/22/02-4/1/02	
CASING MAT /DIA. SCH 40 PVC / 4		SCREEN: TYPE Slotte	nd us	T. SCH 40 PVC TOTAL LENGTH 25			or or organization	
ELEVATION OF: FT.)		OUND SURFACE	TOP OF WE			. 4-inch W SURFACE	SLOT SIZE 20-Slot GRAVEL PACK #2	
6-inch Locking Steel Protective epth Stand Pipe feet	\I	4-Inch Locking T Well Plug	est Graphic Log	Visual Description	Blow Counts	PID Values	REMARKS	
		СЕМЕ	- 	Brown fine to coarse SAND, trace Gravel,	per 6"	(ppm)		
 	***	××××××××××××××××××××××××××××××××××××××		race Silt, trace Brick; dry to wet (fill)				
• •			HHH					
 5			AAAA	•				
	***	XXX	mm				•	-
- -		Cement/ Bentonite	mm					
· 	***	Grout	DDD -	·				
10	₩ -	4-inch PVC	HHH.	Description of the CAND State On Assess	.			
		Well Casing		Green to brown fine SAND, little Silt, trace Gravel; wet (fill)		8.2	lack staining	•
-				Green to brown fine SAND, little Silt; wet		8.1 B	lack staining	
<u>.</u>			833311	fill) Green to brown fine SAND, little Silt; wet		S	light Odor	
<u>5</u>		- Bentonite Chips		fill)		6.0 E	lack staining	
· •		Crapa		Green to brown fine to coarse SAND, little		8.7	\$	
			8 3 3 3 3 1 1 1	Silt, little Peat at 18; wet (fill) Brown PEAT; moist	-	6.7 B	lack staining	
. ₋ 20			6 40 40	SIOWI FEAT, Moist		54.0 T	hickness of peat interval	
· -						ir ir	terpreted from previous Si	ite
. •				Brown to light brown fine SAND, some Slit;	. [59.0	<u>.</u>	
	l · ≡						dor and sheen	
2 <u>5</u>								
				Brown to reddish brown fine to medium SAND, some Silt; wet				
-		00 014 1740				96.5	ree product	
-		Well Screen			[1			
<u>0</u>				Brown to light brown fine to medium SAND,				
• .				ome Silt; wet				
-	=					²¹⁹ C	dor and free product	_
5		#2 Sand						
				Brown fine to medium SAND, some Silt;			•	
- 1				vet ·		110		
-							dor and free product	
<u> </u>							•	
-				Brown SILT, some medium Sand; wet				
-			<u> </u>			172	dor and free product	
_								
<u>5</u>				Brown SILT, some fine to medium Sand;				
-				vet		100		
	-	5-foot PVC Sumo				162	dor and free product	
o								
<u>~</u>	21.5	Push on PV0 Well Cap	, <u></u>		J L	ا لـ∎	ottom of well 50 feet below	



I	Page	1 of	f 1			WE	LL CO	NSTRUCTION LOG			
	WELL N		4		NO	RTHING		EASTING			
-	BBO IEC	RW-11	l ME					LOCATION			
				anus	s form	ner MGP Si	te	124-136 2nd Avenue			
Ī	APPRO\	VED BY			LO	GED BY		7			
-	G. Tye	ers	1070		<u>D.</u>	Moss		Brooklyn, New York GEOGRAPHIC AREA			······································
		IG CONTR				. / L. Adan	10	On Site Along 12th Street			
ł	DRILL B	IT DIAME	TER/TY	25 (II)	BORE	HOLE DIAME	TER	DRILLING EQUIPMENT/METHOD	SAMPLING	METHOD	START-FINISH DATE
Į		1. / Aug				ches		CME-75 / HSA	2" Split S	poon	3/22/02-3/29/02
١		MAT./DIA		_	SCRE			SCH 40 DVC TOTAL ENOTH 2	F.O	. 4 :	or or own 20 Class
		O PVC /	4-incr			YPE Slotted URFACE	TOP OF W	AT. SCH 40 PVC TOTAL LENGTH 2: ELL CASING TOP & BOTTOM SCR	EEN O	A. 4-inch SW SURFAC	SLOT SIZE 20-Slot E GRAVEL PACK
	(FT.)							11			#2
	6-l	Inch Locki el Protecti Stand Pi	ng\		_	4-inch			Blow	PID	
	Depth, Oto feet	Stand Pi	pe \		7	Locking Tea Well Plug	Graphic Log	Visual Description	Counts	Values	REMARKS
						`	<u> </u>	Day for he course CANID HAVE Creat	per 6*	(ppm)	
ŀ			K.	┧	₩	△ CEMENT	mm	Brown fine to coarse SAND, little Gravel, trace Brick, trace Silt; wet at 6 (fill)			
		•	***	7	\sim	• .	1	• •			· -
Ì			- K	1	***		THE THE				
Į	5	·	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3			FTT				5
			- K		****		HHH				
		٠			****	Cement	四四	•			
						Bentonite Grout	FFFFF				
	10		**	1		· 4-inch PVC	HHH				<u>10</u>
			**	1 -	\bowtie	Well Casing	1444	Brown fine to coarse SAND, little Gravel, trace Brick, trace Silt; wet (fill)		50.0	Black staining
			**	1	\bowtie		um	Brown fine to coarse SAND, little Gravel,			Dia di stata
			**	1	\bowtie		m	trace Brick, trace Silt; wet (fill)		71.9	Black staining
ı	15			4	\sim			Brown fine to medium SAND, little Gravel,		♥	 15
Ì						Dantanila	14444	little Silt; wet (fill)		43.9	
						- Bentonite Chips	HHH	Brown fine to coarse SAND, trace Gravel, trace Silt, trace Brick; wet (fill)		31.2	
			1 - 1 -	١.		•	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Brown PEAT; moist	_		
	20			.]			0 30 30	STOWN LAT, MOISE		138	Thickness of peat interval 20
	20			\models			F 77 77			T	interpreted from previous Site
1		•			. : 1	•		Brown fine to coarse SAND, little Silt, trace		7.2	investigation
								Gravel; wet		1.2	
	05]						05
	25							Brown fine to coarse SAND, some Silt; wet			<u>25</u>
				=	1 1	11			-	7.0	
						20-Slot PVC				7.2	Odor and trace free product
						Well Screen					<u>.</u>
	30_				[; j			Brown fine to coarse SAND, some Silt; wet			<u>30</u>
٠.] ; ; <u> </u>			7			•
] }					23.2	Trace free product
						- #2 Sand	<u> </u>				
	35_	•			! :		<u> [</u>	Brown fine to coarse SAND, some Silt; wet			<u>35</u>
				:=	1::		F1	brown line to coalse SAND, some Sill, wet			
6/11/02] []		<u> </u>			17.6	Trace free product
					 		<u> </u>				• -
ROUXGDT	40				100		<u> </u>	Danis Cill and 6 Cd to			<u>40</u>
ž] : [- 1	Brown Silt and fine Sand, trace coarse Sand, trace Gravel; wet		4	• -
					[j.]		T - T			1124	Trace free product
ဗ				-							•
RECOVE-1.GPJ	45				1			5 00 45 0		1	<u>45</u>
ઠ્ઠા				.]				Brown Silt and fine Sand, trace coarse Sand, trace Gravel; wet			- ,
띲						- 5-foot PVC				280	
빎				1	[]	Sump				1	
BORINGWELL	50					- Push on PVC					50
ž						Well Cap					Bottom of well 50 feet below.
8											Idita sultate



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age 1	of 1			WE	ELL CO	NSTRUCTION LOG	i		
WELL NO.	N 42		NO	RTHING		EASTING			
PROJECT N		wani	s forr	ner MGP S	ite .	LOCATION 124-136 2nd Avenue			
APPROVED	BY	· · · · · · · · · · · · · · · · · · ·	LO	GGED BY					
G. Tyers DRILLING CO	ONTRACTO	OR/DR	D.	Moss		Brooklyn, New York GEOGRAPHIC AREA			
Aquifer D	rilling &	Testi	ng, In	c. / L. Adar	ns	On Site Along 12th Street			<u> </u>
DRILL BIT D	IAMETER/	YPE	BOR	EHOLE DIAME	TER	DRILLING EQUIPMENT/METHOD		ING METHOD	
6.25-in. / <i>I</i>	Auger T./DIA.		SCRI	nches EEN:		CME-75 / HSA	\2" Spi	lit Spoon	3/22/02-3/27/02
SCH 40 P	VC / 4-ir		1	YPE Slotte SURFACE	M. TOP OF W	AT. SCH 40 PVC TOTAL LENGTH ELL CASING TOP & BOTTOM S		DIA. 4-inc GW SURF	ACE GRAVEL PACK
FT.)	Locking			4-inch					#2
Steel Pr	otective and Pipe		7	Locking Te Well Plug	st Graphic Log	Visual Description	Blov Cour per 6	nts Valu	es REMARKS
]]		CEMEN.	HHH	Brown fine to coarse SAND, trace Grave	al.		
	·	※			四四	trace Silt, trace Brick; dry to moist (fill)			
• -	į.	\approx			HHH				
5	×	\approx	***		HHH				
_	×	\approx	***		HHH	BRICK; dry (fill)			
-	×	\approx	***	- Cement/	HHH	Brown fine to coarse SAND, some Grav trace Brick, trace Silt; wet at 7 (fill)	el,		
-	×	***	***	Bentonite Grout	HHH				
0	Ě	※	***		四四	No. 1			
_	Š	₩ ⁻	***	 4-inch PVC Well Casing 	1444	Brown fine to coarse SAND, little Silt, tra	ice	Y	Sheen and odor
-		$\overset{\circ}{\bowtie}$	***		12224	Gravel; wet (fill)	.		Or by a fine
-	×	\approx	***		四四	Brown fine to coarse SAND, little Silt, litt Gravel; wet (fill)	ile	55.3	Slight odor
i	¥	Y				Brown fine to coarse SAND, little Silt, litt	le		Siight odor
				- Bentonite	HHH	Gravel; wet (fill)	ŀ	72.2	2
-				Chips	HHH	Brown fine to coarse SAND, some Grav little Silt; wet (fill)	el,	74.9	a .
-	(4)	7.	10.50	,	27.27.2	Brown PEAT; moist	_/ '		
o					5 75 55			1.7	
<u>.</u>	:-:	⋰⊨	∄∷⊹		14-14-14	Brown fine to coarse SAND, some Silt,			investigation
		ं⊨	∄!			trace Gravel; wet		11.	7
÷		∵≡				± 1			
r									
<u>5</u>			∄			Brown fine to coarse SAND, some Silt,			
-	F		∃ ∷			trace Gravel; wet		19.3	,
-		E	3	- 20-Slot PVC					'
-				Well Screen				111	
<u>0</u>			=			Brown fine to coarse SAND, some Silt,	İ		
-]:	Ξ	\exists			trace Gravel; wet			•
-								4.1	
-				#2 Sand					
5		ΥE				Brown fine to coarse SAND, some Silt,			Odor
- `		E	= -	`		trace Gravel; wet		25	
-	ļ. ·		3					35.	'
-								141	
<u>.</u> .	[;		∄ ``		1	Brown fine to coarse SAND, some Silt,	- 1		Odor and trace free product
_		 	∄ ∴			trace Gravel; wet	1	477	· I
-	1	Ξ					.	174	'
<u>.</u>	- [∴⊨	∄ ∷					. 1	
<u>5</u>			ન ::.			Brown fine to coarse SAND, some Silt,			Odor and trace free product
-	[:					trace Gravel; wet	. [and the second second
-	1:			5-foot PVC				294	•
-	ŀ.			Sump			ľ		
0	L.			Push on PVC Well Cap				· {, B .}	Bottom of well 50 feet below
						-			



WELL CONSTRUCTION LOG Page 1 of 1 WELL NO. EASTING NORTHING RW-13 PROJECT NO./NAME LOCATION 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams On Site Along 12th Street DRILL BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 6.25-in. / Auger CME-75 / HSA 2" Split Spoon 3/22/02-3/26/02 10-inches CASING MAT./DIA. SCREEN: SCH 40 PVC / 4-inch TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch SLOT SIZE 20-Slot TOP & BOTTOM SCREEN **ELEVATION OF:** GROUND SURFACE TOP OF WELL CASING GW SURFACE GRAVEL PACK #2 6-inch Locking Steel Protective Stand Pipe Locking Test B!ow PID Depth, Graphic Well Plug Visual Description Counts Values REMARKS Log per 6' (ppm) Brown fine to coarse SAND, trace Gravel, CEMENT trace Silt, trace Brick, dry to moist (fill) 5 Brick and Concrete; dry (fill) Brown fine to coarse Sand and Brick; wet Black staining Cement/ 80.8 Bentonite Brown PEAT; moist Brown PEAT; moist 10 4-inch PVC Brown PEAT; moist Well Casing - -73.9 Fine SAND, some Silt, trace Gravel; wet Black staining 21.7 Odor 15 Brown to green fine SAND, some Silt; wet Odor Bentonite Chlos 17.1 20 20 Brown fine SAND, little Silt; wet Slight odor 9.7 25 25 Brown SILT, little fine Sand, trace Gravel; Odor and trace free product wet 118 20-Slot PVC Well Screen 30 30 Brown SILT, little fine Sand, trace Gravel; Odor and trace free product 15.6 #2 Sand 35 Brown fine SAND, some Silt; wet Odo 5.3 40 40 Brown to green SILT, little fine Sand; wet Odor and trace free product 459 G. 45 Brown SILT, some Sand; wet Odor 154 5-foot PVC BORINGAVELL Sump 50 50 Push on PVC Bottom of well 50 feet below land surface



ROUX ASSOCIATES, INC.

Environmental Consulting & Management

/ELL NO.		NO	RTHING		NSTRUCTION LOG			*
RW-14 ROJECT NO./NAME		ن	·····		LOCATION			· · · · · · · · · · · · · · · · · · ·
2401Y03 / FC G		s form	ner MGP S	ite	124-136 2nd Avenue			
PPROVED BY 6. Tvers			GGED BY Battista		Brooklyn, New York			
RILLING CONTRAC		LER			GEOGRAPHIC AREA			
quifer Drilling &	& Testin	ng, Inc	. / S. Mille HOLE DIAME	r	On Site Along 12th Street DRILLING EQUIPMENT/METHOD	Lawrence	0.14571100	Larinz suuni 5 issa
.25-in. / Auger	/!!r⊑		inole diame iches	ILEK	Mobile Drill B-61 / HSA	2" Split	G METHOD Spoon	START-FINISH DATE 3/22/02-3/26/02
ASING MAT./DIA.		SCRE						
CH 40 PVC / 4-I			YPE Slotte	D M TOP OF W	AT. SCH 40 PVC TOTAL LENGTH 2 ELL CASING TOP & BOTTOM SCI	25,0 [DIA. 4-inch GW SURFACE	SLOT SIZE 20-Slot E I GRAVEL PACK
T.)					1			#2
6-inch Locking \ Steel Protective ofth, Stand Pine	\	\supset	4-Inch Locking Te	st Graphic		Blow	PID.	
et Stand Pipe		7 L	Well Plug	Log	Visual Description	Counts per 6*	Values (ppm)	REMARKS
<u> </u>			ZCEMEN	MM	Brown fine to coarse SAND, little Gravel,		TI (PPy	
·	****			四四	trace Silt; dry (fill)			
- }				HHH				
	***	\bowtie		m	Brown fine to coarse SAND, little Gravel,		49.5	
- -	***	***		HHH	trace Silt; dry to moist (fill)		AE O	
<u>.</u>	***	****	Cement/ Bentonite	环环草	Brown fine to coarse SAND, little Gravel, \trace Silt; wet (fill)	/	45.9	
-	****		Grout	10 24 25	Brown PEAT, moist	-		
- -	***	***	4-inch PVC	27 77 7				
	***	***	Well Casing	교교학	Brown PEAT; moist to wet			
- {	***	***		1 27 20	•		1.3	
. (~~	~~	•	27 27 기				•
			- Bentonite	1 27 27				
-			Chips		Dark brown SAND, some Silt, trace Peat; wet			
-					•		2.7	
			•					
<u>. </u>				22 22 3	Dark brown PEAT; moist to wet			
-			·	4 34 34				
-				다 다 되			125	
<u>.</u>			. "	0 00 00				
<u>. </u>]			Dark brown fine SAND, little Silt; wet			Odor and trace free produc
-			-				147	out and house hou product
]	20-Stot PVC Well Screen					
_		:	Well Screen			e.		
-					Dark brown fine SAND, little Silt; wet			Sheen
							413	
•								
			#2 Sand					
·					Dark brown fine SAND, little Silt; wet			race free product
							475	
			÷					
			÷			•		
-					Dark brown fine SAND, little Silt; wet			Sheen
							>2000	·
-		!		T - T				
<u>.</u>					Dark brown flog CAND, IIII - CIII			
-				<u> -</u>	Dark brown fine SAND, little Silt; wet			
-			5-foot PVC				524	
			Sumo					
)								



Page 1 of 1 WELL CONSTRUCTION LOG

Page		of 1			VVC	LL CL	INSTRUCTION LOG				
WELL				NO	RTHING		EASTING				-
DDO II	RW-1						LOCATION				
			/0011G	form	ner MGP Si	·	124-136 2nd Avenue				
	OVED BY	-C GOV	yanus	10011	GED BY	te					
G. T					Moss		Brooklyn, New York			· .	
	ING CONT	FRACTO	R/DRILI	LFR	141033	····	GEOGRAPHIC AREA				
					: / L. Adan	16	Off Site 12th Street Sidewalk		-	·	
DRILL	BIT DIAM	ETER/TY	PE I	BORE	. / L. Adan	TER	DRILLING EQUIPMENT/METHOD	SAMPLING	METHOD	START-FINISH DATE	
	in. / Aug		-		nches		CME-75 / HSA	2" Split S		4/4/02-4/4/02	
CASIN	IG MAT./D	IA.		SCRE					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	11.11.02 11-11.02	
SCH	40 PVC	/ 4-inc	:h	T'	YPE Slotted	і м	AT. SCH 40 PVC TOTAL LENGTH 2	5. 0 DI	A. 4-inch	SLOT SIZE 20-Slot	
	ATION OF:		GRO	UND S	URFACE	TOP OF W	/ELL CASING TOP & BOTTOM SCR		W SURFACE		
(FT.)										#2	
١.,	Flush Me		V		4-inch						
μυεριη,	Manhole Co	over \			Locking Tes Well Plug	Otabilic	Visual Description	Blow Counts	PlD Values	REMARKS	
feet					Wenting .	Log	visual Description	per 6"	varues (ppm)	REMARNS	
		₩.	. ==	(مل آ	2]	0 0	CONCRETE	<u> </u>	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		0		00	Concrete	HHH	Brown fine to coarse SAND, trace Gravel,	´ .			-
		\~	VI I	W			trace Brick, trace Silt; dry to wet (fill)			**	-
		<u>~</u>	y l	\bowtie		mm			1		-
-		Ĭ,	ý l	~~~		HHH	•				
5		\approx	X I	\mathbb{R}^{1}		1444					_5
		<u>~</u>	y l	\mathbb{Z}		mm				1 2 3	-
·		ľ××	ýl	~~~		B-3-3-3-3-3-	Brown to group fine CAND But Oth A		L I		-
		\approx	X I	\bowtie	Cement/	MA	Brown to green fine SAND, little Silt, trace Gravel, trace Brick, trace Concrete; wet		73.7		_
		₩	y l		Bentonite Grout	M	(fill)			Odor and sheen	-
10		ξ×	ý J	الممم	4-inch PVC	FCF4	Brown fine SAND, little Silt, trace coarse		147		<u>10</u>
		\sim	X I	\sim	Well Casing	m	SAND, trace Gravel; wet (fill)			•	
		\sim	y I	\bowtie			Brown fine to coarse SAND, little Silt, trace Gravel; wet (fill)		51.8		
		· [~	Ň I			mm	, , ,	- -		-	_
	•	\sim	<u> </u>	\sim			Brown fine SAND, some Silt, trace coarse \SAND; wet (fill)	ا اہر	7.1		
15					•	Tr. Tr. 7	Brown PEAT; moist	/	♣		15
					Bentonite	2 2 2 2 2			Y	Thickness of peat interval	
			-		Chips					Interpreted from previous Sit investigation	te
							Brown fine SAND, little Slit, trace coarse			mvesugadon	
			ી				Sand; wet		29.2		
20			<u>. </u>								20
[Brown fine Sand and Silt, trace coarse			Slight odor	
						$\lceil - \rceil$	Sand; wet		1 007		-
L						<u> </u>	•		89.7	· · · · · · · · · · · · · · · · · · ·	~ .
25				3.3							25
							Brown fine SAND, little Silt, trace coarse		41	Slight odor	
[[2]		2.30			Sand; wet			· -	-
ļ						\vdash \vdash \vdash \vdash			154		
					· 20-Stot PVC Well Screen						
30						$\vdash \cdots \dashv$					30
			· 🚞			[<u></u>	Brown fine SAND, little Silt, trace Coarse	[. ,			70
1		13					Sand; wet				
ļ					ŧ,	[[]			243		
† * *											• -
35				: ;;	#2 Sand	[유교다				•	20
- 55							Brown fine SAND, little Silt, trace Coarse		· r	Trace free product	<u>35</u>
						- · · - ·	Sand; wet				
						F			172		
} - <i>-</i>						[+] 귀		1.			
40							· •	.			4.5
40						Hu-J	Brown fine SAND, little Silt, trace Coarse			Trong from product	40
}							Sand; wet			Trace free product	٠.,
·					+			·	612	•	
<u> </u>					• • •					*	
· ; -								1			
45			F			<u> </u>	Brown floo Sand and Sills wat			04	<u>45</u>
						├ —	Brown fine Sand and Silt; wet			Odor and trace free product	
									684		
· -		[::		2.57	5-foot PVC Sump						
					Sauch						
50				L	Push on PVC						50
1				-	Well Cap					Bottom of well 50 feet below	(
L									· · · · · · · · · · · · · · · · · · ·	land surface	



ROUX ASSOCIATES, INC Environmental Consulting & Management 1377 Motor Parkway Islandia, NY 11749 Telephone: 631-232-2600 Fax: 631-232-9898

WELL CONSTRUCTION LOG Page 1 of 1 WELL NO. EASTING NORTHING **RW-16** PROJECT NO./NAME 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site LOGGED BY APPROVED BY G. Tyers C. Battista Brooklyn, New York GEOGRAPHIC AREA DRILLING CONTRACTOR/DRILLER Aquifer Drilling & Testing, Inc. / L. Adams
DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETE Off Site 12th Street Sidewalk BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 2" Split Spoon CME-75 / HSA 4/5/02-4/5/02 6.25-in. / Auger 10-inches CASING MAT./DIA. SCREEN: SCH 40 PVC / 4-inch TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch SLOT SIZE 20-Slot ELEVATION OF: TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE GRAVEL PACK GROUND SURFACE #2 (FT.) Flush Mount 4-inch Locking Test Well Plug Manhole Cover Blow PID Deoth. Graphic Visual Description Counts Values REMARKS feet Log per 6' (mag) CONCRETE
Brown to dark brown fine to coarse SAND, 62 Concrete 0 some Gravel, trace Silt; wet at 4 (fill) #2 Sand 5 Dark gray fine to coarse Sand and Gravel, little Silt; wet (fill) 7.9 Slight odor 10 10 4-inch PVC Brown to dark gray GRAVEL, some fine to 5.8 coarse Sand, trace Silt, trace Ash, trace Cinders; wet (fill) Brown to dark gray fine to coarse SAND, trace Sitt, trace Gravel; wet (fill) 4.1 Brown fine to coarse SAND, trace Silt, 15 15 26.4 trace Gravel; wet (fill) Brown PEAT; moist Thickness of peat interval interpreted from previous Site investigation Brown Silt and fine Sand, little Gravel; wet. 20 20 - -25 25 Brown Slit and fine Sand, little Gravel; wet odor 11,5 20-Slot PVC Well Screen 30 30 Brown Silt and fine Sand, little Gravel; wet Formation 6.1 Collapse 35 Brown Silt and fine Sand, little Gravel; wet obc 6/11/02 10.0 40 40 Dark gray fine SAND, some Silt, little Clay; 62.3 6 45 45 Dark gray fine SAND, some Silt, little Clay, Trace free product little Gravel: wet 5-foot PVC 4.4 Sump Push on PVC Bottom of well 49 feet below Well Cap 50 50 land surface



Push on PVC

& Management WELL CONSTRUCTION LOG Page of WELL NO. NORTHING RW-17 PROJECT NO./NAME 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY G. Tyers R. Kovacs Brooklyn, New York DRILLING CONTRACTOR/DRILLE GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams Off Site 12th Street Sidewalk DRILL BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 2" Split Spoon 6.25-in. / Auger 10-inches CME-75 / HSA 4/9/02-4/9/02 CASING MAT,/DIA. SCREEN: SCH 40 PVC / 4-inch TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch SLOT SIZE 20-Slot GROUND SURFACE **ELEVATION OF:** TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE GRAVEL PACK (FT.) #2 Flush Mount 4-inch Locking Test Manhole Cover Blow PID Depth, Graphic Well Plug Visual Description Counts Values REMARKS feet oer 6* (mag) CONCRETE Concrete Brown to dark brown fine to coarse SAND. some Silt; wet (fill) 13.0 Slight odor Brown to dark brown fine to medium SAND, some Silt; wet (fill) 14.0 Slight odor Cement/ Bentonite Grout 10 4-inch PVC Brown to dark brown fine Sand and Silt: Well Casing 22.3 wet (fill) Slight odor Brown fine to medium SAND; wet (fill) 12.7 Brown fine Sand and Silt; wet (fill) Slight odor 12.3 Brown to reddish brown fine to medium Slight odor 15 10.7 15 SAND; wet (fill)
Brown PEAT: moist Bentonite Thickness of peat interval Chips interpreted from previous Site 7.4 investigation Brown fine to medium SAND; wet Slight odor 20 20 Brown to dark brown fine SAND; wet Slight odor 10.7 25 25 Brown to dark brown fine SAND; wet Slight odor 11.9 20-Stot PVC Well Screen 30 30 Brown to dark brown fine SAND: wet Slight odor 14.9 #2 Sand 35 Brown fine to medium SAND; wet Slight odor 9.7 40 40 Brown fine to medium SAND; wet Odor and trace free product 47.3 45 Brown fine to medium SAND: wet Odor and trace free product 59.9 5-foot PVC Sump 50

50

Bottom of well 50 feet below

land surface



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

1377 Motor Parkway Islandia, NY 11749 Telephone: 631-232-2600 Fax: 631-232-9898

age 1	of 1		WE	ELL CO	NSTRUCTIO	N LOG				
WELL NO.			NORTHING		EASTING		*****			
PROJECT I	NO./NAME				LOCATION 124-136 2nd Ave	2010			· · · · · · · · · · · · · · · · · · ·	
92401Y0 APPROVED		anus	former MGP S LOGGED BY	ite	124-130 Zilu Ave	mue				
G. Tyers	CONTRACTOR	VOOII I	C. Battista		Brooklyn, New '	York	•			·
Aquifer I	Drilling & T	estino	eк <mark>۲, Inc. / L. Ada</mark> r	ns	Off Site 12th Str					
DRILL 81T (DIAMETER/TY	PE	BOREHOLE DIAME	TER	DRILLING EQUIPME	NT/METHOD S	AMPLING		START-FINISH DATE	
6.25-in. /	Auger AT./DIA.		10-inches SCREEN:		CME-75 / HSA		2" Split S	spoon	4/19/02-4/19/02	
SCH 40 I	PVC / 4-inc		TYPE Slotte		T. SCH 40 PVC TO	TAL LENGTH 25.	<u>0</u> DI	A. 4-inch	SLOT SIZE 20-Slo	ot
ELEVATIOI (FT.)	N OP:	GRUC	JND SURFACE	TOP OF W	ELL CASING TOP	A BUTTOM SCREE	=IN (GW SURFACE	GRAVEL PACK #2	
	ish Mount ole Cover		4-inch Locking Te	st			Blow	PID		
lepin, """ feet			Well Plug	Graphic Log	Visual Des	cription	Counts per 6"	Values (ppm)	REMARKS	
			حام ا	P. 19.1	CONCRETE		1	(PPIII)		
	0		o Concrete	TITI I	Brown fine to coarse SAN Brick, trace Gravel; wet a	ND, little Silt, trace				-
		Ĭ	※ ઁ	四世				 .	* .	-
5	\bowtie	# 1	≈	四出						, <u>.</u>
- <u>-</u> .		y		田田			1			
	***		Cement/	HHH						
. .	***	7	A Bentonite Grout	HHH					•	
10	××		4-inch PVC		Brown fine to coarse SAN	ND. little Silt_trace		 		
	\bowtie	X : 1	Well Casing	HHH	Brick, trace Gravel; wet (fill)		0.0		
	\approx		<u>~~</u>	444	Brown fine to coarse SAN Brick, trace Gravel; wet (0.0		
 15	·				Brown PEAT; moist	<u> </u>		ا ده الما	Strong organic odor Thickness of peat interval	، ا
<u>15</u>			 Bentonite Chips 	77 77 7	·			nn l	interpreted from previous	
	1.1	ļ			Brown fine to coarse SAf little Silt, trace Gravel; we	ND, some Peat,		0.0	investigation	
					On ado diatol We					
20_		: 🔲					*			2
					Brown fine to coarse SAN some Silt, trace Gravel; v	ND, some Peat, vet				
								0.0		
<u>25</u>					Brown fine to coarse SAN	ND, some Sitt.				_2
					trace Peat, trace Gravel;			0.0	•	
			20-Slot PVC						•	
30			Well Screen			• •		 		
					Brown fine to coarse SAN trace Peat, trace Gravel;	ND, some Slit,				_
					nace i car, adoc Oldvel,			0.5		-
			- #2 Sand							
35_					Brown to dark gray fine S	AND SHE CIR			•	3
					trace Gravel; wet	AND, INTO OIL,				
· •										
					•					
10				4	Brown to dark gray fine S	AND, little Silt,	1			-
· •					trace Gravel, wet			5.8		
		目							•	
15						•				4
					Brown to dark gray fine S trace Gravel; wet	AND, little Silt,				_
			5-foot PVC					0.0		
			Sump		•				· .	
50	1.3	_	Push on PVC Well Cap).	ull I	Bottom of well 50 feet belo	_ <u>5</u> ow
				A 1 1 1 1 1	and the second s				land surface	~**



age 1	of 1			WE	ELL CC	NSTRUCTION LOG				
VELL NO.			NO	RTHING		EASTING				÷
ROJECT NO.						LOCATION				
2401Y03 /	FC Gov	vanus	s forn	ner MGP Si	ite	124-136 2nd Avenue				
PPROVED B	Y			GGED BY		Dun aldrin Marie Vante				
G. Tyers DRILLING CO	NTRACTO	R/DRII	<u> U.I</u> I FR	Moss		Brooklyn, New York GEOGRAPHIC AREA				
Aquifer Dri	ilina & *	Testin	ig, Ind	c. / L. Adan	ns	Off Site 12th Street Sidewalk				
DRILL BIT DIA	METERIT	/PE	BORE	HOLE DIAME	TER	DRILLING EQUIPMENT/METHOD	SAMPLING		START-FINISH DATE	
3.25-in. / Au CASING MAT.	uger /DIA		10-ir	nches		CME-75 / HSA	2" Split	Spoon	4/18/02-4/18/02	
SCH 40 PV		h		YPE Slotted	м Е	AT. SCH 40 PVC TOTAL LENGTH 2	5.0 D	IA. 4-inch	SLOT SIZE 20-Slot	
LEVATION O			DUND S	SURFACE		ELL CASING TOP & BOTTOM SCR	EEN	GW SURFACI	E GRAVEL PACK	
FT.)	Mount			/ 4-inch				·	#2	
eoth, Manhole	Cover			Locking Tea	st Graphic		Blow	PID		
eet	^		\leq	Well Plug	Log	Visual Description	Counts per 6*	Values (ppm)	REMARKS	
		, 🗂	ַלָּלָּדְן [2	10.10.1	Concrete				
	0		0	Concrete	四四	Brown fine to coarse SAND, little Silt, trace Brick, trace Gravel; wet at 4 (fill)				
	. 🗠	\approx	\bowtie		1444	Blick, trace Gravel, wet at 4 (iiii)				
÷ .	\bowtie	$\stackrel{\sim}{\sim}$	\bowtie		血油		1 .			
_	\approx	$\stackrel{\sim}{\sim}$	\bowtie		FFFF					-
-	\approx	\cong	\bowtie		HHH					
_	\approx	\mathcal{A}	***	- Cement/	四四					
_	\approx	\tilde{A}	\sim	Bentonite Grout	1444		1			
	\approx	Y -	XXX	- 4-inch PVC	1222	Brown fine SAND, trace Silt, trace coarse				
-	\sim		\sim	Well Casing	m	Sand, trace Gravel; moist (fill)		0.9		
•	₩	$\tilde{\gamma}$	\sim			Brown fine SAND, trace Silt; wet (fill)				
			~~~		1999	Peat and green-grey CLAY; moist	┨`	0.7		
_				- Bentonite	6 77 77	reat and green-grey CEAT, moist			Thickness of peat interval	
-				Chips					intrepreted from previous Site investigation	te
-	() ·		( · · · ·		<u> </u>	Brown fine SAND, little Silt, trace Gravel;		1.8		
-					1	wet				
- )					-  -  -  -  -  -  -  -  -  -  -		÷		. •	
			<b>.</b>			Brown fine SAND, little Silt; wet		. 1		-
-	1.		]					0.0		
-			1 : 1							
<u>.</u>			<b> </b>							
_			<b> </b>  - -		7-7-4	Brown fine SAND, little Silt; wet			Odor	•
			<u>}</u> : ::	- 1				0.0		
-			]::	- 20-Slot PVC					•	-
				Well Screen	12.53		,			
<del>-</del>			<b>{</b>		F	Brown fine SAND, little Silt, trace coarse			Odor	
			<b>]</b> : ::			Sand; wet		141		
			]: ::					0.7		
		Œ	<u> </u> . ;;}	- #2 \$and	F. 1 - 3					
-		: ==	1. []		<u> </u>	Brown fine SAND, little Silt, trace coarse	1 .	111	Odos	
			1 : 1			Sand; wet			Odor	
-			:::		- T T			0.0		
•			]: :							
_			<u> </u> :-::							
			<b> </b>			Brown fine SAND, little Silt; wet			Odor	
-			1		L		1	0.0		
-			:::							
<u>-</u>			]: ::		[					
_	1.					Brown fine SAND, little Silt; wet			Odor	
-	1	:l		- 5-foot PVC	<u> </u>			0.0		
				Sump	[+]					
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- -		ા	1 1	D	1 — —	* * *			1	
<u>.</u>				Push on PVC Well Cap			<b>.</b>		Bottom of well 50 feet below	



Page 1 of 1 WELL CONSTRUCTION LOG

age 1		1				NOT KUCTION LOG				
WELL NO.	RW-20		NO	RTHING	٠	EASTING				٠
PROJECT			l	<u> </u>	· · · · · · · · · · · · · · · · · · ·	LOCATION	·····			
92401Y0	03 / FC G	owan	us forr	ner MGP Si	ite	124-136 2nd Avenue				
APPROVE				GGED BY		Dun alden Marri Vanla				
G. Tyers	CONTRAC	TOR/O	[ [ ]. 	Battista		Brooklyn, New York GEOGRAPHIC AREA		-		
				c. / L. Adan	ns	Off Site 12th Street Sidewalk				
DRILL BIT	DIAMETER	VTYPE	BOR	EHOLE DIAME	TER	DRILLING EQUIPMENT/METHOD	SAMPLING		START-FINISH DATE	
6.25-in. /	/ Auger			nches		CME-75 / HSA	2" Split S	Spoon	4/17/02-4/17/02	
CASING M SCH 40		inah	SCRI			T COU 40 DVC TOTAL COLORER 2	<b>50</b> 0	. Almah	01 07 0175 20 Clot	
ELEVATIO	F V C / 4- N OF:			YPE <b>Slotted</b> SURFACE	TOP OF W	AT. SCH 40 PVC TOTAL LENGTH 2: ELL CASING TOP & BOTTOM SCR	EEN (	A. <b>4-inch</b> 3W SURFAC	SLOT SIZE 20-Slot E   GRAVEL PACK	
(FT.)		·				· /		311 00111710	#2	
	ush Mount \ tole Cover			4-inch Locking Te	n+		01	515		
Depih, ^{Marii} i feel	IOIA COVEI	\ .		Well Plug	St Graphic Log	Visual Description	Blow Counts	PID Values	REMARKS	
ieet		<b>1</b> →=	$\leq$ 6		Log	·	per 6"	(ppm)		
	Ø.	ا و		2.1 - Concrete		CONCRETE  Dark brown fine to coarse SAND, trace	4			_
		°0			HHH	Gravel, trace Brick, trace Silt; dry to wet		][		_
			· V		mm	(fill)				
		***	· · · · · ·		HHH					-
5		***			四四	•			Odor	_5
		***	XXX	•	HHH					•
		<b>***</b>	<b>***</b>		mm			13.3		-
 		***	<b>***</b>	- Cement/ Bentonite	HHH		· .			-
10		<b>***</b>		Grout - 4-inch PVC						_19
		<b>***</b>	<b>***</b>	Well Casing	444	Brown to dark green fine to coarse SAND, little Gravel, trace Silt, trace Brick; wet (fill)		Y 11.4		_
		<b>~~</b>		1 -	m		-			
'					mm	Brown fine to coarse SAND, little Gravel, trace Slit, trace Brick; wet (fill)		12.0		-
15	ļ	200			亞亞亞	Brown PEAT; maist				1
10		·			1 77 77				Thickness of peat interval	
				<ul> <li>Bentonite</li> <li>Chips</li> </ul>	4444	Decree and the American College	<b>-</b>		interpreted from previous Si	ite
						Brown medium to coarse SAND, little Silt, trace Gravel, trace Peat; wet		10.5	investigation	•
							-		Slight odor	
20_						Daniel Carlo CAND The Com		<b>  </b>		2
		∴ F			-	Brown fine SAND, little Sitt; wet		· ·		
		E						6.5		
		::::E	$\equiv$							٠
25		::::E			[ - ]					2
				<b>'</b>	T	Brown fine SAND, little Silt; wet			Odor	
·		:	3					24.0		-
		::::E	=::::	- 20-Slot PVC				21,9	•	-
		ijΈ	<b>=</b> (1	Well Screen						-
30_		E			F	Brown fine SAND, little Silt; wet				_3
		E				Prown this Ovian' time out Met				
		<i>::::</i> }E						3.8		
		:::: <u> </u>	$\exists$							
35			$\exists$	#2 Sand	[					_3
		E	<b>∃</b> ∷			Brown fine SAND, little Silt, trace Gravel;				
			3			wet		6.4		
	•	: ; ; <b>:</b>	∃ ::					"."		
		E	= 1				1			
<u> 10</u>		E	<b>=</b>		<b></b>	Dark gray to light brown fine to medium	-			4
			<b>=</b> ::::::::::::::::::::::::::::::::::::			SAND; wet		] 🗗		
							'	4.3		
		· · · · E	∃ ::		·····				•	-
15_		F	<b>=</b> : :	•	::::::::					4
- <u>-</u>						Dark gray to light brown fine to medium		[	•	_
				- 5-foot PVC		SAND, trace Silt, trace Gravel; wet		5.2		
		, . l		Sump	:::::::			0.2	•	٠.
1.5				- Push on PVC				[ ]		
<u>50</u>	· · · · · · · · · · · · · · · · · · ·			Well Cap	كنسنيا				Bottom of well 49.5 feet belo	ow -5
	•						$(x_1,\dots,x_{n-1})\in \mathbb{R}$		land surface.	



Page 1 of 1 WELL CONSTRUCTION LOG

Page 1 of 1	YY C	LL CO	NSTRUCTION LOG				
WELL NO.	NORTHING		EASTING				
RW-21 PROJECT NO./NAME		<del></del>	LOCATION				
92401Y03 / FC Gowani	us former MGP Si	ite	124-136 2nd Avenue			- 6	
APPROVED BY	LOGGED BY		1	•			
G. Tyers	D. Moss		Brooklyn, New York				
DRILLING CONTRACTOR/DR	ILLER		GEOGRAPHIC AREA				
Aquifer Drilling & Test DRILL BIT DIAMETER/TYPE	ing, Inc. / L. Adan	ns TER	Off Site 12th Street Sidewalk DRILLING EQUIPMENT/METHOD	SAMPLING N	IETHOD	LOTADY PINIOU DATE	
6.25-in. / Auger	10-inches	IEK	CME-75 / HSA	2" Split S		START-FINISH DATE 4/16/02-4/16/02	
CASING MAT./DIA.	SCREEN:		(OIIIL-137 HOA	Z Spire S	10011	(4/10/02-4/10/02	
SCH 40 PVC / 4-inch	TYPE Slotted	a k	T. SCH 40 PVC TOTAL LENGTH 2	<b>5.0</b> DIA	. 4-inch	SLOT SIZE 20-Slot	
ELEVATION OF: GF	ROUND SURFACE	TOP OF WE	LL CASING TOP & BOTTOM SCR	EEN G	N SURFAC	E GRAVEL PACK	
(FT.)						#2	
Flush Mount Manhole Cover	4-inch Locking Te	st		Blow	PID		
Depth, Warmore Cover	Well Plug	Graphic Log	Visual Description	Counts	Values	REMARKS	
	<del></del>		NON CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACT	per 6*	(ppm)	, <del></del>	
	o F Concrete		CONCRETE Brown fine to coarse SAND, trace Gravel,	イ Ⅱ			
		HAAA !	race Brick, trace Silt; dry to wet (fill)				•
		mm		-			-
5	(m)	4444			[		. 5
<u> </u>	ř.	mm			ri I		_5
·	<b> </b> ****	14441		1			-
	×	四四四					•
	Cement/ Bentonite	HHH	•		)		•
10 💥	Grout 4-inch PVC			'	<u> </u>		_1
	Well Casing		Brown fine SAND, little Silt, trace coarse	A A	32,1		
	[***]	mm,	Sand; wet (fill)	-	[		
	*****	HHH.		<u> </u>	11.6		
	****	hhhhh t	Brown fine to coarse SAND, trace Silt, race Gravel; wet (fill)		(  ····		
15		[까 까 리 E	Brown Peat and green to gray Silt and	~   H	N I	Thickness of post inter-	_1
	- Bentonite	7 27 37 C	Clay; moist			Thickness of peat interval interpreted from previous Si	ite
	Chips	الم معسمين		_    <u> </u>	5.0	investigation	•
 1.47-		<u> </u>	Brown fine SAND, little Silt; wet				•
20							2
			Brown fine SAND, little Silt, trace coarse		ri i		_
		Desemble 1	Sand; wet		10.8		•
					10.0	'	
	<b>=</b> [3]				P[		
25_	<b>∃</b> >41	<b>-</b> 2-3 .	Require fine CAND little City		[	Diameter 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	_2
<b>以</b> (1)			Brown fine SAND, little Silt; wet			Strong odor	
<u>                                    </u>	크용의				52.9		-
	20-Slot PVC Well Screen						
30	T vyell ocieen						3
	<b>∃</b> \$}{	[	Brown fine SAND, little Silt; wet		L( I	Strong odor	
	<b>∃</b>			-  -  -  -  -	<b>!</b>		
	<b>#</b>				87.4		
	#2 Sand						
35_							3
		•	Brown fine SAND, little Silt; wet	] []		Slight odor	
N					28.6	*	
<u>KV</u> E	<b>3</b> 33					•	
40	<b>3</b> 50				<b>[</b>		
	田場		Brown fine SAND, little Silt; wet			Slight odor	4
	30.41		and the same and the		ll [	angle odol	
	<b>3</b>	$\vdash$ $\rightarrow$ $\Box$			18.8		
	∃			-			
<u>45</u>	<b>∃</b>				II. I	to the second second	4
			Brown fine SAND, little Silt; wet		ht	Slight odor	_
				.	ľl		
	5-foot PVC				16.4	, .	
	Sump						
50	Push on PVC		· · · · · · · · · · · · · · · · · · ·				5
and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o	Well Cap					Bottom of well 50 feet below land surface	N
	the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	and the second of the second					



ROUX ASSOCIATES, INC.
Environmental Consulting
& Management

ge 1 of ELL NO.	<u>1</u>	NORTHING		NSTRUCTION LOG			
RW-22						<u></u>	
PROJECT NO./NAME 92401Y03 / FC Gowanus former MGP Site				LOCATION 124-136 2nd Avenue			
APPROVED BY LOGGED BY			]				
. Tyers RILLING CONTRAC	CTOR/DRILL	D. Moss		Brooklyn, New York GEOGRAPHIC AREA			
auifer Drillina	& Testin	a. Inc. / L. Ada	ms	Off Site 12th Street Sidewalk			
RILL BIT DIAMETER/TYPE   BOREHOLE DIAMETER				SAMPLING N		START-FINISH DATE	
<b>25-in. / Auger</b> ASING MAT./DIA.		10-inches SCREEN:		CME-75 / HSA   2	" Split Sp	10001	4/15/02-4/15/02
CH 40 PVC / 4		TYPE Slotte	ed MA	T. SCH 40 PVC TOTAL LENGTH 25.0		4-inch	SLOT SIZE 20-Slot
EVATION OF: T.)	GRO	UND SURFACE	TOP OF WE	LL CASING TOP & BOTTOM SCREE	:N G\	W SURFACI	E GRAVEL PACK #2
Flush Mount Manhole Cover		4-inch Locking T	oot	-	Blow	PID	.,1".7
oth, Wannote Cover		Well Plug		Visual Description	Counts	Values	REMARKS
<u> </u>				Concrete	per 6"	(ppm)	
- '	100	Concrete	14444 i	Brown fine to coarse SAND, trace silt, trace	1 .	.	
				Brick, trace Concrete, trace Gravel; dry to wet (fill)			
-		<b>[</b>		roc (my			
<u>-</u>			HHH				
	(XXX)		ppp				
			HHH				
		Cement/ Bentonite	四四	•	·		
		Grout 4-inch PVC	HHH			699	
		Well Casing	HHH!	Brown fine SAND, trace Silt; wet (fill)		099	
	<b>***</b>	<b>***</b>	mm.	Brown fine to coarse SAND, trace Silt; wet		>2000	Odor and block staining
	<b>***</b>	<b>***</b>		fill)		1	Odor and black staining
				Brown fine to coarse SAND, little silt; wet		5.7	
-		- Bentonite		(fill)		3.7	
		Chios	7777	Brown fine SAND, little Silt; wet (fill) PEAT, Green-Gray Clay and fine Sand	1	7	Thickness of peat interval
			11 11 11	LAT, Green-Gray Gray and line band	<u> </u>	27.8	interpreted from previous Si
•					] ' []		investigation
=				Brown to gray fine SAND, little Silt, trace coarse Sand, trace Gravel; wet		0.0	
•							*
-				Brown to gray fine SAND, little Silt, trace		11.9	
		2分	1000	coarse Sand, trace Gravel; wet			•
		20-Slot PVC					• •
•		Well Screen	F353		·		
·		<u>[</u> [6]	<u>                                   </u>	Brown to gray fine SAND, little Silt, trace		0.0	
		1::		coarse Sand, trace Gravel; wet	-		
		<b>1</b> 2.5	<u>                                   </u>				
		#2 Sand	<u> </u>	·	'		
_			1243	Brown to gray fine SAND, little Silt, trace	.	0.0	·
				Brown to gray fine SAND, little Silt, trace coarse Sand, trace Gravel; wet		-	
_						2.1	
				Brown fine SAND, little silt; wet		l	
			<u> </u> , — — —				
						0.0	
<del>-</del>				Brown fine SAND, little silt; wet		0.0	
-		5-foot PVC Sump					
• !			<b>,</b> [=74]		. "		
		Push on PV Well Cap			لبانا	<b></b> j	,



ELL NO.		<del></del>	NO	ORTHING		EASTING				-
	W-23					- LOCATION				
ROJECT N			us for	ner MGP S	ite	LOCATION 124-136 2nd Avenue				
PPROVED		Jowan	LC	GGED BY						
. Tyers				Moss		Brooklyn, New York				
RILLING C				شمام ۱۱ م		GEOGRAPHIC AREA		·		
RILL BIT D	IAMETE	A TES	ung, In BOR	c. / L. Adan	TER	Off Site 12th Street Sidewalk  DRILLING EQUIPMENT/METHOD	SAMPLING	METHOD	START-FINISH DATE	
.25-in. /	Auger		10-i	nches			2" Split S	poon	4/10/02-4/10/02	
ASING MA CH 40. P LEVATION	VC / 4		-	EEN: IYPE <b>Slotte</b> ( SURFACE	I MA	T. SCH 40 PVC TOTAL LENGTH 25		A. <b>4-inch</b> SW SURFACI	SLOT SIZE <b>20-Slot</b>	_
T.)		•	NOOND	OOMINGE	101 01 111	J. J. Borromoone			#2	
Flus _{pth,} Manho	h Mount	\		4-inch Locking Te	et		Blow	PID		
pth, wanno et	ie Cover			Well Plug	Graphic Log	Visual Description	Counts	Values	REMARKS	
		1 F	<b>\$</b>				per 6"	(ppm)		
-	Ò.	10.1	۔ ا	/2 ∫  - Concrete	الشيا	Concrete Brown fine to coarse SAND, trace Brick,	7			
-			1.0			trace Concrete, trace Gravel; dry to wet				
-				j	mm.	(fill)				
-		×××	\ <u>\</u>		1444		1 .			
		, , , , , , , , , , , , , , , , , , ,	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		四四					
•		<b>***</b>			14441	•		41.		
-		<b>***</b>	<b>***</b>	Cement/	四四				•	
		<b>***</b>	<b>***</b>	Bentonite	HHH					
		<b>***</b>		Grout 4-inch PVC	LITT			1354		
		<b>***</b>	XX	Well Casing		Brown fine to coarse SAND; little Silt, trace Gravel; wet (fill)		Y .100.	Odor and trace free produc	ŧ
-		$\bowtie$	<b>***</b>	1	m	Brown fine Sand and Silt, trace coarse	1	72.8	Odor	
-		<b>***</b>	<b>***</b>	1	mm	Sand; wet (fill)		<b>Ă</b> l		
- i		~~~		i		Brown fine SAND, little Silt, trace Gravel;		352	Odor	
_					<u> </u>	wet (fill)	<b>d</b>	T	Thickness of peat interval	
<u>.</u> .				- Bentonile Chips	r 37 37	PEAT and Green-Gray CLAY, trace Shells; moist			interpreted from previous S investigation	Si
- )						Brown fine to coarse SAND, little Slit, trace Gravel; wet	1	92,5	Odor	
<u>-</u>		l E	= ::			Brown fine to coarse SAND, little Silt, trace			Odor	
-						Gravel; wet		50.7	-	
-		E						33.7		
-		( · · · ·	<b>=</b>   ` '						*	
<u>5</u>		10 F	<b>∃</b> ∵			Brown fine to coarse SAND, little Silt, trace			Odor	
-			∃ ::			Gravel; wet	-		Odor	
÷			=		T = T			25.2		
-		E		- 20-Slot PVC Well Screen				-		
- )		· · ·   ·	$\exists$							
- -		IS (E		' '		Brown fine to coarse SAND, little Silt; wet			Odor	
-				]				40.1	,	
-		I F		ļ. · .						
-		I. E		- #2 Sand						
<u> </u>					<b> </b>	Brown fine to coarse SAND, little Sllt; wet			Odor	
		\	$\equiv$					<b>   </b>	, ·	
<del>.</del> -		E	$\equiv$	1				13.7		
_	•	l E	$\exists :$	1	F - 1					
<u> </u>		I) I	<b>∃</b> ∵		1	Banna 8-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		<b>[</b> ]		
<b>-</b> .			$\exists$		- T - T	Brown fine to coarse SAND, little Silt; wet			Odor	
-		K #	$\exists$					9.6		
-			∃ ::	1						
5			$\exists$						•	
			<b>-</b>			Brown fine to coarse SAND, some Silt; wet		11	Odor	
-								12.7		
-			-	5-foot PVC Sump				12.1		
_				Jonny	Fig. 7			1		
D .										



& Management WELL CONSTRUCTION LOG 1 Page 1 of WELL NO. NORTHING **EASTING** RW-25 PROJECT NO./NAME 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site LOGGED BY APPROVED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Off Site 12th Street Sidewalk DRILLING EQUIPMENT/METHOD Aquifer Drilling & Testing, Inc. / L. Adams BOREHOLE DIAMETER DRILL BIT DIAMETER/TYPE START-FINISH DATE SAMPLING METHOD CME-75 / HSA 2" Split Spoon 4/11/02-4/11/02 6.25-in. / Auger 10-inches CASING MAT./DIA. SCREEN: SCH 40 PVC / 4-inch TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch SLOT SIZE 20-Slot ELEVATION OF: GROUND SURFACE GW SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GRAVEL PACK Flush Mount 4-inch Manhole Cover Locking Test PID Blow Graphic Depth. Well Plug Visual Description REMARKS Counts Values feet Log (ppm) Concrete Brown fine to coarse SAND, trace Brick, trace Concrete, trace Gravel; dry to wet 5 . . CemenV Bentonite Grout 10 4-inch PVC 8.1 Brown fine SAND, little Silt, trace Gravel; Well Casing 198 Brown fine to coarse SAND, little Silt, trace Odor - -Gravel; wet (fill) 478 Brown fine to coarse SAND, little Sift, trace Odor 15 15 Gravel; wet (fill) PEAT and Green-Gray CLAY; moist - -Bentonite Chips 2 22 24 Thickness of peat interval nterpreted from previous Site Brown fine to coarse SAND, little Silt, trace 518 investigation 20 Gravel; wet 20 Brown fine to coarse SAND, little Silt, trace Odor Gravel; wet 610 _ _ 25 25 Brown fine to coarse SAND, little Silt; wet 31.4 . . 20-Slot PVC Well Screen 30 Brown fine to coarse SAND, little Silt, wet Odor 231 #2 Sand 35 Brown fine SAND, little Silt, trace coarse Odor Sand: wet 315 40 40 Brown fine SAND, some Silt, trace coarse Odor Sand; wet 136 ç 45 Brown fine Sand and Silt; wet Odor 246 5-foot PVC Sump 50 50 Push on PVC Well Cap Bottom of well at 50 feet

below land surface



	1			NSTRUCTION LOG			
ELL NO. RW-27		NORTHING		EASTING			
ROJECT NO./NAME				LOCATION	<u></u>		
2401Y03 / FC G	owanus		ite	124-136 2nd Avenue		•	
PROVED BY		LOGGED BY		Dunaldon Navi V			•
. <b>Tyers</b> RILLING CONTRACT	OR/ORILL	D. Moss		Brooklyn, New York GEOGRAPHIC AREA		<del></del>	
ruifer Drillina 8	Testino	d. Inc. / L. Adar	ns	Off Site 12th Street Sidewalk			
<b>quifer Drilling &amp;</b> RILL BIT DIAMETER			TER	DRILLING EQUIPMENT/METHOD	SAMPLING N		START-FINISH DATE
<u> 25-in. / Auger</u>		10-inches		CME-75 / HSA	2" Split S	poon	4/12/02-4/12/02
asing Mat./Dia. <b>CH 40 PVC / 4-i</b> Evation of: T.)	nch	SCREEN:  TYPE Slotte  JND SURFACE		AT. SCH 40 PVC TOTAL LENGTH 25 ELL CASING TOP & BOTTOM SCRE		. <b>4-inch</b> W SURFACI	SLOT SIZE 20-Slot  GRAVEL PACK  #2
Flush Mount		4-inch Locking Te	ot .		Blow	· BID	
oth, Warmone Cover et		Well Plug	St Graphic Log	Visual Description	Counts	PID Values	REMARKS
<u> </u>		رقار	6 6 T	Concrete	per 6"	(ppm) ■ I	····
- لام	0	O Concrete	HH	Brown fine to coarse SAND, trace Brick,	7 . [		
	\ 	لِيْنِ	mm	trace Concrete, trace Gravel; dry to wet (fill)			
	<b>***</b>	$\approx$	HHH	Anny			
_	₩ 🗯	$\approx$	mm				
_	$\approx$ $t$	$\approx$	HHH	•	1 - 1	<b></b> ∐∣ ∣	
	$\approx 1$	$\approx$	mm		_{		
	<b>₩</b> {	Cement/	HHH	•	1	<b>.</b>	
<u> </u>	~~~	Bentonite	FATH				
- '	$\approx$	Grout	EEEEE	Daniel San to access CAND Bull Commit	.	1.7	
	$\approx$	<b>~~</b>	四四	Brown fine to coarse SAND, little Gravel; wet (fill)	·[ ]	<b>y</b>	
	$+\bowtie$	4-inch PVC	[]]	Brown fine to coarse SAND, little Gravel;	1	6,9	
	$\approx$ 1	Well Casing	mm	wet (fill)		X	
1	ا مم		[]]]	Brown fine to coarse SAND, little Gravel,		3.1	_
-			<b>亚亚</b> 亚	trace Silt; wet (fill)	7 I	<b>I</b>	Thickness of peat interval
		<ul> <li>Bentonite</li> <li>Chips</li> </ul>	2 24 24	PEAT and Green-Gray CLAY; moist	Y	Ti I	interpreted from previous Sit
		Cilips				2.7	investigation
ľ	. i .	4.3		Brown fine SAND, fittle Sift, trace Gravel,	~  ,		
Í				trace coarse Sand; wet			
·		8 Y		Brown fine to coarse SAND, little Silt, trace			
				Gravel; wet	·	17.7	
l:						'''	
l l						<u> </u>	•
- İ				Desire See CAND Bull City			
į:		$\cdot$		Brown fine SAND, little Silt; wet			
					'	32.4	
·		20-Slot PVC Well Screen			] . [		
		Well Screen			1	<b>]</b>	
-				Brown fine SAND, little Silt, trace coarse	t		
				Sand; wet			
į:		2위				3.8	
ľ			L		- [   ₁		
		- #2 Sand			[	<b>]</b>	
				Brown fine SAND, little Silt, trace coarse		<b>)</b>	
Į.				Sand; wet		5.2	•
<b>!</b> :				•	.	0.2	
ļ:							
_ [				D 6 04415	'		
[:				Brown fine SAND, some Silt; wet			
-						3.8	
[							
. [						<b>.</b>	
-			F	Brown fine SAND, some Silt, wet		<b>(</b>	
ľ				STOTE INTO GENERAL STORES COME ONLY WELL			
		5-foot PVC				7.1	
1.				and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	1 1	m i i	
<u> </u>		Sump		•	- [ ]	<b>( i</b>	
		Sump				<b>(</b>	



ELL NO.	N	ORTHING		EASTING			
RW-29				LOCATION			
2401Y03 / FC G	owanus for	mer MGP S	ite	124-136 2nd Avenue			
PROVED 8Y	L(	OGGED BY		Buookhan New Yeste			
Tyers ILLING CONTRAC	OR/DRILLER	. Moss		Brooklyn, New York GEOGRAPHIC AREA			
uifer Drilling &		nc. / L. Adan	ns	On Site Along Pathmark Wall DRILLING EQUIPMENT/METHOD   8	24101010	TUCE	LOTATITE TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE
ill bli Djameter 25-in. / Auger		REHOLE DIAME Inches	IER		SAMPLING ME 2" Split Spo		START-FINISH DATE 4/25/02-4/25/02
SING MAT./DIA.	SCF	REEN:					·
CH 40 PVC / 4-i Evation of:		TYPE Slotted SURFACE	TOP OF WE	T. SCH 40 PVC TOTAL LENGTH 25. ELL CASING TOP & BOTTOM SCREE	U DIA. EN GW	4-inch SURFACE	SLOT SIZE 20-Slot
Cinch Lacking		. 4 Inch				<del> </del>	#2
6-inch Locking Steel Protective		4-inch Locking Te	st Graphic		Blow	PID	
th, Stand Pipe		Well Plug	Log	Visual Description	Counts per 6"	Values (ppm)	REMARK\$
		CEMENT	HH	Brown coarse to fine SAND, trace Silt,			
		<u>'</u>	四世,	trace Brick, trace Gravel; dry to moist (fill)			
	$\approx$	1	四四				
		] .	HHH			301	Odor and black staining
		,		Black fine to coarse SAND, little Wood, trace Gravel; moist to wet (fill)		301	
	***	Cement/ Bentonite	HHH			,	
		Grout	HHH				
	₩ ₩	] .	MH.	CONCRETE and WOOD; wet (fill)			Dia de statata a
			四位,	CONCRETE and WOOD; wet (Till)	<b>    </b>		Black staining
	$\approx$	4-inch PVC Well Casing		Brown fine to medium SAND, little Silt,		12.8	Black staining
	~~~ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1		Irace Gravel, wet (fill) Green to gray CLAY and PEAT; moist	<b>│</b>		Patalogue de la companya de la companya de la companya de la companya de la companya de la companya de la comp
•			2 24 24			İ	Thickness of peat interval interpreted from previous Si
		 Bentonite Chips 		Gray fine SAND, little Silt, little Wood; wet	-	44.4	investigation
	File Felix					77.4	Black staining
		•		Gray fine to coarse SAND, little Silt, trace		17.6	Odor and black staining
-		1		Wood; wet			÷
		1				,	
<u> </u>		:				12.5	
		:		Gray fine SAND, some Silt, trace coarse SAND; wet			Odor and black staining
		20 01-4 71 /0	<u> </u>			• .	•
		20-Slot PVC Well Screen		•			
		:		Gray to brown fine SAND, little Silt; wet		6.0	Odor
ľ						. [
ļ						}	•
		- #2 Sand					
<u> </u>		ľ	<u>[</u>	Gray to brown fine SAND, little Silt; wet		459	Odor
į							
		1					
						762	
. ,		:		Brown fine to medium SAND, some Silt; wet	'	. 02	Odor and trace free product
		:					
		-					
- :		:		Brown fine SAND, little Silt; wet	•	314	04
				STOWN THE SANO, INGE SILL, WEL			Odor
		5-foot PVC					
ŀ		Sump					



Well Cao

& Management WELL CONSTRUCTION LOG Page 1 of 1 WELL NO. EASTING NORTHING RW-30 PROJECT NO./NAME 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site LOGGED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams On Site Along Pathmark Wall DRILL BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE CME-75 / HSA 6.25-in. / Auger 10-inches 2" Split Spoon 4/26/02-4/26/02 CASING MAT./DIA. SCREEN: SCH 40 PVC / 4-inch DIA. **4-inch** GW SURFACE TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 SLOT SIZE 20-Slot ELEVATION OF: GROUND SURFACE TOP & BOTTOM SCREEN TOP OF WELL CASING GRAVEL PACK (FT.) #2 6-inch Lacking 4-inch Depth Steel Protective Locking Test Blow PID Graphic Stand Pipe Visual Description Well Plug Values REMARKS Counts feet per 6" (ppm) Brown coarse to fine SAND, trace Silt, CEMENT trace Brick, trace Gravel; dry to moist (fill) 5 228 Brown coarse to fine SAND, little Gravel: Odor and black staining moist (fill) Cement/ Bentonite Grout 10 10 4-inch PVC 5.7 Brown fine to coarse SAND, little Gravel, Well Casing trace Wood, trace Brick; wet (fill) 6.2 Brown fine to medium SAND, trace Gravel. trace Silt; wet (fill) 8.9 Brown fine SAND, little Silt, trace Gravel: 15 Odor and black staining Bentonite wet (fill) Chips 8.7 Brown fine SAND, little Silt, trace Gravel; Odor and black staining wet (fill) 10.4 Gray fine to medium SAND, trace Silt, Odor and black staining trace Peat; wet 20 20 22 2 Fine SAND, trace Silt: wet Black staining Brown PEAT; moist 13.3 Odor and black staining Brown fine SAND, little Silt; wet 25 25 12.7 Gray fine SAND, trace Silt; wet Odor and black staining 20-Stot PVC Well Screen 30 30 17.1 Brown fine SAND, little Silt; wet Odor and trace free product #2 Sand 35 728 Fine SAND, little Silt; wet Odor, black staining, and free product 40 40 1067 Fine SAND, little Silt; wet Odor, black staining, and free broduct 45 840 Fine SAND, little Silt; wet Odor, black staining, and free product 5-foot PVC Sump 50 Push on PVC 50

Bottom of well 50 feet below

land surface



Page 1 of 1 WELL CONSTRUCTION LOG

age 1	of	1		· · · · · · · · · · · · · · · · · · ·	LL CO	NSTRUCTION LOG				
WELL NO.	W-31			NORTHING		EASTING				
PROJECT N						LOCATION				
		owa		rmer MGP S	ite	124-136 2nd Avenue				
APPROVED	BY			LOGGED BY		Bus status Manaka at				
G. Tyers DRILLING C	ONTRAC	TOR/F		D. Moss		Brooklyn, New York GEOGRAPHIC AREA				
Aquifer D	rillina 8	& Te:	stina.	<u>Inc. / L. Adan</u>	ns	On Site Along Pathmark Wal	1			
DRILL BIT D	IAMETER	VTYPE	BC	REHOLE DIAME	TER	DRILLING EQUIPMENT/METHOD	SAMPLING		START-FINISH DATE	
3.25-in. / ₄)-inches		CME-75 / HSA	2" Split S	Spoon	4/29/02-4/29/02	
CASING MA SCH 40 P		inah		REEN: TYPE Slotte		T SCU 40 DVC TOTAL LENGTH 3	EA 5.	. 4 (0. 07 0mm 20 Clat	
ELEVATION				D SURFACE		AT. SCH 40 PVC TOTAL LENGTH 3 ELL CASING TOP & BOTTOM SCR	EEN (A. 4-inch BW SURFAC	SLOT SIZE 20-Slot	
FT.)						1		,,, oo,,,,,,	#2	
C lack	Locking	$\overline{}$		4-Inch						
epth, Steel Pr feet Sta	and Pipe	٧r	==1	Locking Tes Well Plug	Grapino	Visual Description	Blow Counts	PID Values	REMARKS	
eer		1	. }		Log		per 6"	(ppm)		
	لح	싟시	لنا	CEMENT	1777	Brown coarse to fine SAND, trace Silt,				
	ì	~~	\ \times	──) Bentonite	mm	trace Brick, trace Gravel; dry to moist (fill)			·	
· -				Grout	14444		Ì			
				- Bentonite	mm					
<u>5</u>				Chips		Fine SAND, trace Silt; wet (fill)		945	Odor, black staining, and	-
-	ľ	· . · .	11.7	VI)	HHH				sheen	
-	}				FTTH					
				41	HHH.					
<u>.</u>).	ŀ			4-inch PVC Well Casing	[在在]	'				
-			=	Š	HHH.		,			
-			=:		1444	Barray for the sea 15 are 0.441D. James 0.75	٠.,	35.9		
		· []				Brown fine to medium SAND, trace Silt, trace Brick, trace Gravel, trace Wood,		Y		
			<u>=</u>	M	[111]	trace Coal Fragments; wet (fill)		26.3		
5				A .	mm	Brown fine to medium SAND, some Silt, trace Gravel; wet (fill)		X		
-						Brown fine to coarse SAND, little Sitt, trace		>2000	Odor	
-					HHH	Gravel; wet (fill)		XI .	0001	
				Á	HHH	Brown fine to coarse SAND, little Silt, trace		886	Odor, black staining, and	
20_						Gravet; wet (fill)			trace free product	:
			= :::	뵈		Brown fine to coarse SAND, little Silt, trace	~	>2000	Odor and free product	
-			===	20-Slot PVC		Gravel; wet		1349		
-				Well Screen	- 3 - 3	Brown fine SAND, little Silt; wet				
.5	- 1	: :/:	= ;::	74		•				
<u>-</u>						Gray to brown fine SAND, little Silt, trace		257	Odor and trace free product	
			=		First	coarse SAND; wet	.			
-	į		=::	- #2 Sand	F	•				
_			=	#2 Sand	<u>-</u>					
0			=					192		
			=	M	₽ ₩₩	Gray to brown fine SAND, little Silt, trace coarse SAND; wet			Odor and trace free product	1.
-	- 1		=							
-			\equiv							
- 5	}				[` ` ;;					
<u>-</u>			=::	翻		Gray to brown fine SAND, little Silt, trace		254	Odor and trace free product	
-	ŀ					coarse SAND; wet		1		
- -			=	Ý.		$\mathcal{A}^{k} = 1$				
- ,								,		
<u>) </u>	ŀ					Once to become fire OAND 1999 - OW	-	415		
-	1		$\equiv 0$	* 1.1		Gray to brown fine SAND, little Sift, trace coarse SAND; wet	.		Odor and trace free product	1
-	İ	. : 1	\equiv			<u>-</u>				
-	. [===							
	.	1	\exists	<u>예</u>						
_	į.	†				Gray to brown fine SAND, some Silt; wet		785	Odor and trace free product	
_	ļ					•		1		
-	į.			5-foot PVC	F2==1			1		
				Sump						
	۱.			Push on PVC		· · · · · · · · · · · · · · · · · · ·				
<u>) </u>				Well Cap					Bottom of well 50 feet below	



WELL NO.	W 22		4	ORTHING		NSTRUCTION LOG EASTING				_
PROJECT N						LOCATION				
2401Y03 PPROVED		owai		rmer MGP Si OGGED BY	ite	124-136 2nd Avenue				
3. Tyers			[D. Moss		Brooklyn, New York				
RILLING C				nc. / L. Adan	ne	GEOGRAPHIC AREA On Site Along Pathmark Wall				
RILL BIT D	DIAMETER	Z/TYPE	BO	REHOLE DIAME	TER	DRILLING EQUIPMENT/METHOD	SAMPLING		START-FINISH DATE	_
3. 25-in. / CASING MA	Auger T./DIA.			-inches REEN:		CME-75 / HSA	2" Split	Spoon	4/30/02-4/30/02	
CH 40 P LEVATION FT.)	VC / 4-			TYPE Slotted SURFACE	TOP OF W	AT. SCH 40 PVC TOTAL LENGTH 35 ELL CASING TOP & BOTTOM SCRI	5.0 D EEN	IA. 4-inch GW SURFAC	SLOT SIZE 20-SIO E GRAVEL PACK #2	t
Steel Pi	Locking rotective and Pipe	\ 	7	4-inch Locking Te Well Plug	st Graphic Log	Visual Description	Blow Counts	PID Values		
				CEMENT	LLLL	Brown coarse to fine SAND, trace Silt.	per 6*	(ppm)		
-		***	·	Cement/Bento Grout		trace Brick, trace Gravel; dry to moist (fill)	1			
-		***	××	A GIONI	HHH.			14		
<u>.</u>				- Bentonite	HHH	*		16		
-				Chips	田田田	Gray-brown fine to coarse SAND, trace Silt, trace Gravel; moist (fill)				
		1. 4.		•	田田					
- -				4-inch PVC	田州			21.1		
<u>'-</u> .			= .	Well Casing		Gray-brown medium SAND, trace Silt,		13.8	Odor, sheen	
-		::::F	= :		田田	trace Gravel, trace coarse Sand; moist (fill)		111		
-					开开					
<u> </u>			∃ :	:	HHH	Brown coarse to fine Sand, little Silt, trace		6.5	Odor, trace black staining	,
			∄ :	:]	1444	Gravel; moist (fill) Brown fine to medium SAND, little Sift,	}	7.3	Odes	
			=	:	田田	trace coarse Sand; wet (fill)			Odor	
•		[Brown fine to coarse SAND, little Silt; wet		15.3		
<u> </u>				.]		Gray-brown fine SAND, little Silt, trace		36.0	Odor, sheen	
- =			∄ .	· . #2 Sand	1	coarse Sand; wet				
-			∄ :							
<u>-</u> 5		ŀ	\equiv					07.4		
-		E		.]		Gray-brown fine SAND, little Slit, trace coarse Sand; wet		87.4	Odor, sheen	
				20-Slot PVC						
-				Well Screen						
<u> </u>			=			Gray-brown fine SAND, little Silt, trace		118	Odor, sheen	
· ·		E				coarse Sand; wet				
- , .		: :								
<u>.</u>			=					1		
-		::				Brown fine SAND, some Silt; wet		67.4	Odor	
-										
-		· · E			<u> </u>					
<u>-</u>						Brown fine to medlum SAND, little Silt; wet		107	Odor	
- 			=							
-										
5_				.] .						
-				4		Brown fine SAND, some Silt; wet		68.9	Odor	
-		·		5-foot PVC	<u> </u>					
-				Sump						
<u>0</u>				Push on PVC Well Cap	LTLLT		1.	Ш	Bottom of well 50 feet beld	O
				TTOII OUP		and the second s			DOMOTH OF WELLOW IREC DELC	UV



Page 1 of 1 WELL CONSTRUCTION LOG

Page	1	of	_1_			VVE	LL CC	ONSTRUCTION LOG
WELL					NO	RTHING		EASTING
DDA II		N-33 O./NAM	100			· · · · · · · · · · · · · · · · · · ·		LOCATION
				nue	form	ner MGP Si	to	LOCATION 124-136 2nd Avenue
APPR			GOWE	anus		GED BY	16	
G. Ty						Moss		Brooklyn, New York
DRILL	ING C	ONTRA	CTOR/	DRILL.				GEOGRAPHIC AREA
Aqui	fer D	rilling	& Te	sting	g, Inc	. / L. Adan	าร	On Site Along Pathmark Wall
DRILL	BIT D	IAMETE	ER/TYP	E	BORE	HOLE DIAME	TER	DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE
6.25-	in. / .	Auger	•			nches		CME-75 / HSA 2" Split Spoon 5/1/02-5/1/02
		T./DIA.			SCRE			OOL 40 DVO Od 0
ELEVA		<u>VC / 4</u>	-ıncn		T	YPE Slotted SURFACE	TOD OF W	MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch SLOT SIZE 20-SIOT WELL CASING TOP & BOTTOM SCREEN GW SURFACE GRAVEL PACK
1	AHON	OF:		GRU	ב כואוט	URPACE	TOP OF W	WELL CASING TOP & BOTTOM SCREEN GW SURFACE GRAVEL PACK / #2
(FT.)	6-inch	Locking				4-inch		1 #2
Donin S	teel Pr	otective	: \		7	Locking Tes	st Graphic	Blow PID
feet	Sta	ınd Pipe	;		' [Well Plug	Log	Visual Description Counts Values REMARKS
					1		 	per 6" (ppm)
		L.	₩~	1	ѡ	Z-CEMENT	*	Brown coarse to fine SAND, trace Silt, trace Brick, trace Gravel; dry to moist (fill)
			\\\\	1 !	\sim		mm	trace briok, trace Graver, dry to moist (iii)
			W	1	~~~		14441	
			***	1 1	\approx	•	1	
5_			***	1 1	\approx		m	Provin fine to coarse SAND Hitle Silts wet
			\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1	\sim	- Cement/		Brown fine to coarse SAND, little Silt; wet
			***	1 [~~~\ 	Bentonite	mm] ````
			\bowtie	1— Բ	\approx	Grout 4-inch PVC	HHH	
		-	***	1 1	~~	Well Casing		,
10			Į~~~	1	\ <u>````</u>		M	Prove fine SAND some Silt: wet /fill)
			***	1	\approx		F444	Brown fine SAND, some Silt; wet (fill)
			~~	1 6	$\sim\sim$		m	
							k44441	Proventing SAND same Silt trace searce 8.3
15						- Bentonite		Brown fine SAND, some Silt, trace coarse Sand, trace Gravel; wet (fill)
						Chips	四四	Sano, nace Graver, wet (IIII)
				ļ . J			HHH	Proven to Block stained fine to coorse
				1			14444	1 provinto piacy statuted title to coarse
							mm	SAND, trace Gravel; wet (fill)
20			1.75		2 22 }	· #2 Sand	MM	Gray brown fine to modium SAND little
								Gray-brown fine to medium SAND, little 0.0
ļ				H	· · · ·		— : : : 	GIII., trace Graver, vvet
			F					
							- · - ·	
25			<u> </u>	曰				Brown fine CANID Hitle Cit trace coorse
ļ			[-					Brown fine SAND, little Silt, trace coarse 439 Odor
				H	\equiv		I — : H	Sand; wet
ļ						20-Slot PVC		
					-J	Well Screen		
30			F-					72
ļ					\exists	•		Brown fine SAND, little Silf, trace coarse ' Odor
			<u> </u>				$\parallel - \parallel - \parallel$	Sand; wet
ļ			-					
			[-	囯		Formation	$\vdash :=:]$	
35						Collapse	L=	10.4
ļ			<u> </u>					Brown fine SAND, some Silt, wet
			<u> </u>					
		*	-					
							├ : — :	
40			<u> </u>	曰				70.5
ļ <u>-</u>				Ħ			[<u>-</u> -⊣	Brown fine SAND, some Silt; wet 79.5 Odor
					$-\Box$		$\mid - \cdot \mid - \mid$	
			<u> </u>					
			 -				F : - :]	
45				Ħ				194
				=		- 5-foot PVC Sump		Frown fine SAND, some Sift, trace coarse 104 Odor
				.		Jump		Sand; wet
1		٠.	:			+2 Sand	<u> </u>	
50								
50						 Push on PVC Weil Cap 		Bottom of well 49.5 feet below
								land surface
L						· :		



45

50

5-foot PVC

Push on PVC

Sump

1377 Motor Parkway Islandia, NY 11749 Telephone: 631-232-2600 Fax: 631-232-9898

& Management WELL CONSTRUCTION LOG 1 of 1 Page WELL NO. EASTING NORTHING RW-34 PROJECT NO./NAME LOCATION 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams
ORILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER On Site Along 12th Street DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 6.25-in. / Auger CASING MAT./DIA. 10-inches CME-75 / HSA 2" Split Spoon 5/3/02-5/3/02 SCREEN: MAT. SCH 40 PVC TOTAL LENGTH 25.0 SCH 40 PVC / 4-inch TYPE Slotted DIA. 4-inch SLOT SIZE 20-Slot TOP & BOTTOM SCREEN ELEVATION OF: GW SURFACE GROUND SURFACE TOP OF WELL CASING GRAVEL PACK #2 (FT.) 6-inch Locking 4-inch Depth. Steel Protective Locking Test PID Blow Graphic Stand Pipe Well Plug Visual Description REMARKS Counts Values feet Loa (ppm) CEMENT Brown fine to coarse SAND, little Silt, trace Gravel; moist to wet at appoximately 7 ft bls (fill) 5 31.2 Cement/ Bentonite - -Grout 10 4-Inch PVC 10.3 Brown fine to coarse SAND, trace Silt, Well Casing trace Gravel; wet (fill) - -17.1 Brown fine sand, little Silt, trace coarse . . Sand; wet (fill)
Green-gray CLAY and PEAT; moist **Benlonite** Thickness of peat interval 15 15 Chips 47.4 interpreted from previous Site investigation Brown fine SAND, little Silt, trace coarse Odor Sand: wet 20 20 26.9 Gray-brown fine SAND, little Silt, trace Odor, sheen . . Gravel: wet . . 25 25 16.6 Gray-brown fine SAND, some Silt; wet Odor ٠. 20-Stot PVC Well Screen 30 30 24.3 Gray-brown fine SAND, some Silt; wet Odor #2 Sand 35 35 107 Gray-brown fine SAND, some Silt, trace Odor, sheen coarse Sand; wet 5 - -40 40 126 Brown fine SAND, little Silt; wet Odor 6

Brown fine SAND, little Silt; wet

134

Odor

land surface

Bottom of well 49 feet below

50



Page 1 of 1 WELL CONSTRUCTION LOG

age	1 of	1			LL CC	NSTRUCTION LOG				
WELL N	ю. RW-35		N	ORTHING	•	EASTING				
PROJEC	CT NO./NAME		I.		· · · · · · · · · · · · · · · · · · ·	LOCATION				
			nus for	mer MGP Si	te	124-136 2nd Avenue				
APPRO\	VED BY		LC	OGGED BY		· .				
G. Tye				. Moss		Brooklyn, New York				
	IG CONTRAC					GEOGRAPHIC AREA				
Aquite	er Drilling	& Tes	sting, In	nc. / L. Adan EHOLE DIAME	18	On Site Along 12th Street DRILLING EQUIPMENT/METHOD	TOAN DUNIO	11671100	107157 5010115475	
C 25 iv	n. / Auger	VITE		EHOLE DIAME	IER	CME-75 / HSA	SAMPLING		START-FINISH DATE	
CASING	MAT./DIA.			EEN:		CWE-131 H3A	2" Split S	opoon .	5/6/02-5/8/02	
	10 PVC / 4	inch		TYPE Slotted	l M	AT. SCH 40 PVC TOTAL LENGTH 2	5.0 pi	A. 4-inch	SLOT SIZE 20-Slot	
	TION OF:			SURFACE	TOP OF W	ELL CASING TOP & BOTTOM SCR		GW SURFAC		
(FT.)									#2	
6-	inch Locking	\ <u></u>		4-inch						
Depth, Ste	el Protective Stand Pipe	VF	= 1	Locking Tes Well Plug	Graphic	Visual Description	Blow Counts	PID Values	REMARK\$	
feet		/	1 1		Log		per 6"	(ppm)		
	6		دل ا	CEMENT	HH	Brown fine to coarse SAND, trace silt, trace)			
	,	0	0	Concrete	}	gravel, trace brick; moist (fill)		 		
		\bowtie		1	m	•		ia i		
		***	\	1	PART.			>2000		
5		~~~	ř	1	HHH	Black fine SAND, trace Silt; moist to wet at		-2000	Odor, trace free product	_
			***	Ä .	Hill	approximately 5.5 ft bls (fill)		>2000		
		\bowtie	***	Cement/ Bentonite	<u> </u>	Black fine SAND, little Silt; wet (fill) Green-gray CLAY and PEAT; moist	~	Y - 2000	Odor, free product	
		\bowtie	***	Grout	<u> </u>			872		
		 	\.\.\.\.	1	<u> </u>	Black to brown fine SAND and SILT; wet			Odor, free product	
10			حُکْمًا ـــ	4-inch PVC						
		~~~	· · · · · ·	Well Casing		•		I <b>∆</b> I		
				٠.		Brown to black fine SAND name Off trace				
				- Poolosiis		Brown to black fine SAND, some Slit, trace coarse Sand; wet				
 16				<ul> <li>Bentonite</li> <li>Chips</li> </ul>	L1					
<u>15</u>						*		272	Oder	-
			1,114,11						Odor	
			1:	1						
				.[						
20			<b>=</b>							
20_		: : <b> </b>				Gray-brown fine SAND, little Silt, trace		311		-3
		[	== :			Clay, trace Peat; wet			,	
		[	=							
• •		: [							l 	
25		· · ·{	<b>-</b>	1						
		: - {	<b>=</b>	1		Brown fine SAND, little Silt; wet		182	Odor	-
		· · ·   <b>!</b>	=	- #2 Sand						
			<u> </u>	20-Slot PVC	<u>                                     </u>			11	•	
				Well Screen	FX + 31					
30_		:	=					158		
		: :	∄∷	1.		Brown fine SAND, little Silt; wet		156	Odor	•
			<b>≡</b> ∷	1	:	•				
			$\exists$							
					<u>                                      </u>		-			
35				1	F2 = 1	Daniel San DANID WW. OW.	•	552		_
		: :	==-	. ·		Brown fine SAND, little Silt, trace coarse Sand; wet			Odor, trace free product	
		ŀ⋰⊧		1.		· ·		141	•	
		<u> </u>	<b>⊒</b>	1					,	
_		[	=====	1			_			
10_			<b>=</b>	- Formation	+ $  -$	Gravebrown fine to medium CAND BUIL	.   .	918	T	
-		┝╌╌┋	<del></del> -	Collapse	<u> -                                    </u>	Gray-brown fine to medium SAND, little Silt; wet			Trace free product	
		┝═╼╀	<u> </u>	1	$L^{-}$					
		$\vdash \dashv$	<del></del>	1						
15 _.				1					•	
<u></u>				- 5-foot PVC	<b>-</b>	Gray-brown fine to medium SAND, little		723	Trace free product	-
				Sump - #2 Sand	<u>                                     </u>	Silt; wet			riace nee product	
					- T				•	
				Bush == 01/0						
• -								1 <b>11</b> 1	i i	
50				Push on PVC Well Cap					Bottom of well 49 feet below	,



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age 1 /ELL NO.	of			NORTHING	TLLL OC	NSTRUCTION LOG				
R	W-36			1401/1111140		2.301.110				
ROJECTIN	IO./NAM		nue 1	former MG	P Sito	LOCATION 124-136 2nd Avenue				
PROVED		OUNT	iius i	LOGGED BY						
. Tyers		0 W = 2		D. Moss		Brooklyn, New York			· · · · · · · · · · · · · · · · · · ·	
RILLING C						GEOGRAPHIC AREA				
RILL BIT C	NAMETE	R/TYPE	sting	, Inc. / L. A	uams Meter	On Site Along 12th Street DRILLING EQUIPMENT/METHOD	I SAMPLING	METHOD	START-FINISH DATE	_
25-in. /				0-inches	WILL LET	CME-75 / HSA	2" Split		5/6/02-5/7/02	
SING MA	T./DIA.			SCREEN:	· · · · · · · · · · · · · · · · · · ·			оросп	(0,0,02 0,7,02	
CH 40 F				TYPE Slo	tted M	AT. SCH 40 PVC TOTAL LENGTH	25.0 r	DIA. 4-inch	SLOT SIZE 20-Slo	t
.EVATION T.)	IOF:	,	GROU	ND SURFACE	TOP OF W	/ELL CASING TOP & BOTTOM SC	KEEN	GW SURFAC	E GRAVEL PACK #2	
6 inch	Locking	1		4-inch					#42	
Steel P	rotective and Pipe	, \		Lockin Well P	g Test Graphic	Visual Description	Blow Counts	PID Values	DEMARKS	
et Su	anu ripe	ا (ر'		AA GILL	ug Log	visual Description	per 6"	varues (ppm)	REMARKS	
	$\overline{}$			CE	MENTHUM	Brown fine to coarse SAND, trace silt, trace	e			•
		$\sim$	×	$\approx$	H	gravel, trace brick; moist (fill)				
		$\bowtie$	$\sim$	$\approx$	mm					
		<b>XXX</b>	×	$\approx$	1444		_	94.3		
_		$\bowtie$	Ľ	$\approx$	FATH	Black fine SAND, some Silt; wet (fill)		Y	Odor	٠
		<b>****</b>	E	Cement	13333	Brown to black fine SAND, some Silt, trace		199	Odor	
		<b>XX</b>	Y	Bentonite Grout	mm	Clay, trace Coal, trace Shells, trace Grave	Ī;	.   X	Odor	
	-	<b>***</b>	Ě	$\approx$		wet (fill) Black fine SAND, little silt; wet(fill)	1	8.7	Odor, trace free product	
			Ķ	×	" HHH	DISCR THE SAIND, HUIB SHI, WET(TH)		Y	2 237 11000 1100 product	
-		<b>****</b>		4-inch P\ Well Cas		1		25.0		
		***		<u>~~</u>	HHH	Brown to black fine to coarse SAND, little	l l	35.0	Odor, trace free product,	
					ppp	Silt, trace Gravel; wet (fill)		51.2	sheen	
				_	H444	Brown to black fine SAND, little Silt, trace Wood; wet (fill)		<b>Y</b>		
_				<ul> <li>Bentonite</li> <li>Chips</li> </ul>	mm	Brown to black fine to medium SAND, little		109	Odes	
					mm	Silt; wet (fill)	'	X	Odor	
		1,50	: [:	1.7.	日子子子	Grey-brown fine SAND, some Silt; wet (fill	<u>-</u>	22.9	Odor	
-					HHH	state and control only from the	'  .	<b>X</b>		
			[:		HHH	Brown fine to coarse SAND; wet (fill)		5.0		
<b>→</b>			=		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Green-grey CLAY and PEAT; moist		- <b> </b>	Thickness of peat interval	
			= 1:		1, 31, 34			[4]	Interpreted from previous Investigation	Site
-			<b>=</b> :			Grey to black fine to coarse SAND, little Silt, trace Gravel; wet		>2000		
•			<b>=</b>			and a control and			Odor, trace free product	
_						Grey to black fine to coarse SAND, little		111	Odor, trace free product	
-			=		F	Silt, trace Gravel; wet			Cabi, nace nee product	
-		[::]	<b>=</b>				1			
		.	#	20-Slot P Well Scre						
- 								>2000		
			=			Grey-brown fine to coarse SAND, little Silt	.	>2000	Odor, trace free product	
			=		<u> </u>	trace Gravel; wet	i			
					[474					
			<u></u>	- #2 Sand						
<u>-</u>		:::	<b>=</b>		1474	Grey-brown fine to coarse SAND, little Silt	.   .	>2000	Odor, trace free product	
		[	=			trace Gravel; wet		·   <b> </b>	, 1 22., 220 noo product	
					12-1	•				
	•	:::{			<u> </u>		1.	141		
_								1785		
	•		==:		<b>↓</b> □ = □	Brown fine SAND, little Silt, trace coarse Sand; wet			Odor, trace free product	
		::	$\equiv$					-14		
			=							
			<b>=</b> :							
<u>-</u> .					[-T4	Brown to light brown fine SAND, some Sill	;	708	Odor, free Product	
			-  -			wet				
				5-foot PV	c					
			.'	Sump						
				Push on : Well Cap						
									Bottom of well 50 feet beto	



WELL CONSTRUCTION LOG Page of WELL NO EASTING NORTHING **RW-37** PROJECT NO./NAME LOCATION 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams
DRILL BIT DIAMETER/TYPE | BOREHOLE DIAMETER On Site Along 12th Street BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 6.25-in. / Auger CME-75 / HSA 2" Split Spoon 10-inches 5/9/02-5/9/02 CASING MAT /DIA. SCREEN: SCH 40 PVC / 4-inch TYPE Slotted MAT. SCH 40 PVC TOTAL LENGTH 25.0 DIA. 4-inch SLOT SIZE 20-Slot ELEVATION OF: GROUND SURFACE TOP & BOTTOM SCREEN TOP OF WELL CASING **GW SURFACE GRAVEL PACK** #2 (FT.) 6-inch Locking 4-Inch Death Steel Protective Locking Test PID Blow Graphic Stand Pipe Well Plug Visual Description Counts Values REMARKS feet per 6* (ppm) Brown fine to coarse SAND, trace Gravel, CEMENT trace Silt, trace Brick; moist to wet (fill) 5 Cement/ Bentonite Grout 1271 Brown to black fine to medium SAND, little obC Silt, trace Gravel, trace Coal; wet (fill) 10 10 4-inch PVC 1197 Brown-green to black fine SAND, little Silt, Odor Well Casing trace Gravel, trace Wood; wet (fill) 380 Brown fine to medium SAND, trace Gravel, trace Silt; wet (fill) 158 Brown-green fine SAND, some Silt; wet 15 15 Bentonite Thickness of peat interval Green-grey CLAY and PEAT; moist 252 interpreted from previous Site investigation Brown fine SAND, little Silt, trace coarse SAND, trace Gravel; wet 20 20 207 Brown fine SAND, little Silt, trace coarse Odor SAND: wet 25 25 664 Brown fine SAND, little Silt, trace coarse Odor SAND; wet 20-Slot PVC Well Screen #2 Sand 30 30 775 Brown fine SAND, little Silt; wet Odor 35 35 1345 Brown fine SAND, little Silt; wet Odor 611 엺 40 40 1489 Brown fine SAND, little Slit; wet Odor, trace free product Formation Collapse 45 45 1183 Brown fine SAND, little Silt; wet Odor, trace free product 5-foot PVC Sumo 50 50 Push on PVC Bottom of well at 50 ft bis Well Cap



age 1 of	1		VVE	ELL CO	NSTRUCTION LOG				
WELL NO. RW-38		NC	RTHING		EASTING				
PROJECT NO./NAME 92401Y03 / FC (		s forn	ner MGP S	ite	LOCATION 124-136 2nd Avenue				
APPROVED BY  G. Tyers			GGED BY Moss		Brooklyn, New York				
DRILLING CONTRAC		LER			GEOGRAPHIC AREA				
Aquifer Drilling DRILL BIT DIAMETE	& Testir	ıg, İn	c. / L. Adar	ns	On Site Along 12th Street DRILLING EQUIPMENT/METHOD	Tarren III.			
6.25-in. / Auger	VIYPE		HOLE DIAME	: IER	CME-75 / HSA	SAMPLING 2" Split		START-FINISH DATE 5/10/02-5/10/02	
CASING MAT./DIA.		SCRE	EEN:				эроон		
SCH 40 PVC / 4- ELEVATION OF:			YPE <b>Slotte</b> SURFACE		AT. SCH 40 PVC TOTAL LENGTH 2 ELL CASING TOP & BOTTOM SCF		IA. <b>4-inch</b> GW SURFAC		ot
(FT.) 6-inch Locking	\		4-inch				·	#2	
Steel Protective Stand Pipe	7		Locking Te Well Plug	St Graphic Log	Visual Description	Blow Counts per 6"	PID Values (ppm)	REMARKS	
(2			CEWEN.	HHH!	Brown fine to coarse SAND, trace Gravel, trace Silt, trace Brick, moist (fill)				
	<b>XXX</b>	<b>***</b>		HHH					
		$\sim$	*	mm	•		1		•
5				四四				*	_
		<b>***</b>	- Cement/	HHH			-	,	
	    -	$\bowtie$	Bentonite	HHH			1		
· - · -		<b>***</b>	Grout	四四					
10	- 💥	$\bowtie$	- 4-inch PVC	HHH	Brown fine to coarse SAND, little Silt, trace		35.4	04	-
• - '			Well Casing	如如	Gravel; moist (fill)		X	Odor	
· <del>-</del>	$\bowtie$	<b>***</b>		田田	Brown fine to coarse SAND, little Silt, trace Gravel; moist (fill)		867	Odor	
15_			- Bentonite	HH	Brown fine SAND, little Silt, trace coarse		>2000	Odor	_
			Chips	1444	Sand; wet (fill)		6.9		_
-	(1			mm	Brown fine SAND, little Silt, trace coarse Sand; wet (fill)		<b> X</b>	Thickness of peat interva	al
-				40,40.4	Green-gray CLAY and PEAT; moist		<b>T</b>	interpreted from previous	
20_				7 77 77			96.6	investigation	<u>:</u>
· -					Gray-brown fine to coarse SAND, little Silt, trace Gravel; wet		90.6	Odor	
		]							
	⋅					į			
<u>25</u>			•		Consideration Control Carlo Button City		381		-
		1	4		Gray-brown fine to coarse SAND, little Silt, trace Gravel; wet			Odor	
· <del>-</del>				$+$ $\rightarrow$ $-$			[		
· <del>-</del>	∷  ≡		- 20-Slot PVC Well Screen			-			
30_		]: []			Gray-brown fine to coarse SAND, little Silt,		874	Odor	
·		::		<u> </u>	trace Gravel; wet			Odor	
-		]:::				ļ.	1		
- -			#2 Sand						
. <u>5</u> .		<u> </u>			Gray-brown fine to medium SAND, little		1341	Odor	-
- '			*. -		Silt; wet		1		
-		]							
_ 0		<b> </b>							
<u>.0                                    </u>		]:::			Brown fine SAND, some Silt; wet		1033	Odor, trace free product	-
· <del>-</del>		<b> </b> :::			· ·		<b>  </b>		
		]:::							
 15		<b> </b>					1		_
<del></del>	:   ===	1::	٠	7474	Gray-brown fine to medium SAND, little		1271	Odor, trace free product	
· •					Silt; wet				
	-		- 5-foot PVC Sump				11.		
-			- 1	pa	· ·	1	1 🖷 1	1	
50			- Push on PVC	-	· ·	,		· ·	. 5



WELL CONSTRUCTION LOG Page of EASTING WELL NO. NORTHING RW-39 PROJECT NO./NAME LOCATION 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY R. Kovacks Brooklyn, New York G. Tyers DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams On Site Along 12th Street DRILL BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE CME-75 / HSA 2" Split Spoon 5/13/02-5/13/02 6.25-in. / Auger 10-inches MAT. SCH 40 PVC TOTAL LENGTH 25.5
TOP & BOTTOM SCREEN CASING MAT./DIA. SCREEN: DIA. **4-inch** GW SURFACE SLOT SIZE 20-Slot SCH 40 PVC / 4-inch TYPE Slotted ELEVATION OF: GROUND SURFACE TOP OF WELL CASING **GRAVEL PACK** #2 (FT.) 6-inch Locking Steel Protective 4-inch Locking Test Blow PID Graphic Stand Pipe Well Plug Visual Description Counts Values REMARKS feet per 6* (ppm) Brown coarse to fine SAND, trace Gravel, CEMENT trace Silt, trace Brick, trace Cobbles; moist (fill) 5 Cement/ Bentonite Grout 10 4-inch PVC 19.9 Brown medium to fine SAND, trace Silt, Slight odor Well Casing trace Gravel; moist (fill) 762 Brown to reddish brown fine SAND, some Slight odor Sift: moist (fill) 659 Brown to reddish brown fine SAND, some Odor 15 15 Bentonite Silt; wet (fill) Chips Brown to reddish brown fine SAND, some Slit, trace coarse SAND; wet (fill) Peat Odor Thickness of peat interval Thickness of pear merval interpreted from previous Site 20 20 investigation Gray to brown medium SAND, some Silt; Ödor 25 25 129 Gray-brown fine SAND, some Silt; wet Odor 20-Stot PVC Well Screen 30 30 421 Gray-brown fine SAND, some Silt; wet Odor #2 Sand 35 35 >2000 Gray-brown fine SAND, some Silt; wet Odor ٠. 6/11 40 40 1200 Gray-brown fine SAND, some Silt; wet Odor, trace free product g G 45 1421 Gray-brown fine SAND, trace Siit, trace Trace free product Gravel; wet 5-foot PVC Sump 50 50 Push on PVC Bottom of well 50 feet below Well Cap land surface



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WELL CONSTRUCTION LOG Page of WELL NO. EASTING NORTHING RW-40 PROJECT NO./NAME 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams On Site Along 12th Street DRILL BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 2" Split Spoon 6.25-in. / Auger 10-inches CME-75 / HSA 5/14/02-5/14/02 CASING MAT./DIA. SCREEN: SCH 40 PVC / 4-inch MAT. SCH 40 PVC TYPE Slotted TOTAL LENGTH 25.0 DIA. 4-inch SLOT SIZE 20-Slot GROUND SURFACE TOP & BOTTOM SCREEN **ELEVATION OF:** TOP OF WELL CASING **GW SURFACE** GRAVEL PACK #2 (FT.) 6-inch Locking Depth Steel Protective Locking Test Well Plug Blow PID Graphic Stand Pipe Visual Description Counts per 6* Values REMARKS feet (ppm) Brown to black stained fine to medlum CEMENT 17.1 SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill) 5 Odor Cement/ Bentonite Grout 10 10 l-inch PVC 10.1 Gray-brown fine SAND, some Silt; wet (fill) Odor Well Casing 22,8 Brown fine to medium SAND, little Silt; wet 15 Odor 15 Bentonite Chips 21.3 Brown fine to coarse SAND, little Silt; wet Odor Green-gray CLAY and PEAT; moist Thickness of peat interval interpreted from previous Site 20 20 29.2 investigation Gray-brown fine to medium SAND, little Odor Silt; wet 25 25 35.1 Gray-brown fine SAND, some Silt; wet - -20-Slot PVC Well Screen 30 30 65.2 Grey-brown fine SAND, some Silt; wet Odor - -#2 Sand 35 35 149 Grey-brown fine SAND, some Silt; wet Odor 671 40 40 78.1 Grey-brown fine SAND, some Silt; wet Odor, trace free product 9 45 522 Brown fine SAND, little Silt; wet Odor, trace free product 5-foot PVC Sump 50 50 Push on PVC Bottom of well 50 feet below Well Cap land surface



ELL NO.	4	NOI	RTHING		EASTING				
RW-4 ROJECT NO./N					LOCATION				
2401Y03 / F		s form	er MGP S	ite	124-136 2nd Avenue				
PROVED BY		LOG	GED BY		7				
. Tyers RILLING CONT		<u> [D.</u> ]	Moss		Brooklyn, New York GEOGRAPHIC AREA				_
quifer Drilli			/I Adam	ne	Off Site 12th Street Sidewalk			•	
RILL BIT DIAME	TER/TYPE		HOLE DIAME		DRILLING EQUIPMENT/METHOD	SAMPLING	METHOD	START-FINISH DATE	_
25-in. / Aug			ches		CME-75 / HSA	2" Split S	Spoon	5/16/02-5/16/02	
ASING MAT./DI		SCRE							_
CH 40 PVC EVATION OF:			PE <b>Slotte</b> o URFACE	TOP OF W	AT. SCH 40 PVC TOTAL LENGTH 25 ELL CASING TOP & BOTTOM SCR	5.0 DI	A. <b>4-inch</b> SW SURFAC	SLOT SIZE 20-Slot E   GRAVEL PACK	
T.)	OIX	COND	OIN ACL	101 01 11	I I I I I I I I I I I I I I I I I I I		OUNTAC	#2	
6 Inch Look	ing\		4-inch		•				_
Steel Protect	ive \ ===	⇒ 1	Locking Tea Well Plug	Giapilic	Visual Description	Blow Counts	PID Values	REMARKS	
et Stand F				Log	Visual Description	per 6"	(ppm)	. (ACINALIA)	
-		جا ا	CEMENT	HHH	Brown to black stained fine to medium		I		_
- -	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<b>****</b>		444	SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)		1		
-	$\bowtie$	$\bowtie$		mm	Orayon wer (mi)				
-	$\bowtie$	$\bowtie$		1444					
_	<b>***</b>			mm					
	·	<u>}</u>	Cement/	14444					
			Bentonite Grout	四四			1		
	\```\	<b>***</b>	Orout .	HHH					
•		<b>****</b>		四四	÷		<b>[</b> ]		
_	- 1	+	4-inch PVC Well Casing		Brown fine to coarse SAND, trace Silt.		166	Odor	
-	<b>***</b>		vven Çasing	HHH	trace Gravel; wet (fill)		<u> </u>		
				HHH	Brown fine to coarse SAND, trace Silt,		1526	Odor	
				1444	trace Gravel; wet (fill)		710	,	
<del>-</del>			Bentonite	14441	Brown fine to coarse SAND, trace Silt; wet		713	Odor	
			Chips	造造句	(fill) Green-gray CLAY and PEAT; moist	-	<b> </b>	Thickness of peat interval	
				1, <u>2, 2, 2, 1</u>	g,			Interpreted from previous Sit	it
								Investigation	
					Brown fine SAND, little Silt, trace coarse			•	
_		<b>-</b>   ∴			Sand; wet		23.5	Odor	
		<b>∄</b> :						Out of	
		] :						•	
		∄							
<del>-</del>		∃ .	•				4000	·	
		∄ :			Brown to black fine SAND, little Silt, trace		1029	Odor	
		] ∶ [		[-· -	coarse Sand; wet		1		
		<b>}</b>  -	20-Slot PVC						
		∄ : 1	Well Screen						
<del>.</del>		<b>∃</b> . [			Brown fine SAND, little Silt, trace coarse		1785	Odor, trace free product	
		<b>H</b>		h —	Sand; wet			ocon, nave nee product	
		= : 1		- :		1.			
		∄:	#2 Sand						
_		∄ : 1							
		<b>∄</b>			Brown fine SAND, little Silt, trace coarse		>2000	Odor, trace free product	
÷		∄ :	• .		Sand; wet				
		∄ :					•	٠.,	
		<b>∄</b> ∶						*	
<del></del>		∄ :		F	Brown fine to medium SAND, little Silt; wet	ļ	1527	Odor, trace free product	
		∄ :		$+$ _ $-$ _ $+$	Element of medicin Ochio, little Olit; Wet			Odor, trace free product	
		∄ :		$\vdash \overline{} \rightarrow \overline{}$					
•		∄ :						,	
•		∄ :	•	-			1		
<del>-</del>		7			Brown fine to medium SAND, little Silt; wet		>2000	Odor, trace free product	
	-	+ +	5-foot PVC					40°	
			Sump	$\vdash : \vdash :$		1	•		
1_		1							



RW-42 ROJECT NO./NAME /2401Y03 / FC Gow PPROVED BY 3. Tyers RILLING CONTRACTOF Aquifer Drilling & T RILL BIT DIAMETER/TY .25-in. / Auger ASING MAT./DIA. SCH 40 PVC / 4-inc LEVATION OF: FT.) 6-inch Locking Steel Protective eet  5 6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe  6-inch Locking Stand Pipe	/anus forn   LO   D   CORRORILLER   Festing, In   PE   BORE   10-in   SCRE   SCRE   GROUND S	GGED BY Moss c. / L. Adam HOLE DIAME nches EEN: YPE Slotted	TOP OF W	EASTING  LOCATION 124-136 2nd Avenue  Brooklyn, New York GEOGRAPHIC AREA Off Site 12th Street Sidewalk DRILLING EQUIPMENT/METHOD CME-75 / HSA  AAT. SCH 40 PVC TOTAL LENGTH 25 //ELL CASING TOP & BOTTOM SCRI /  Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)  Brown to black fine to medium SAND, trace	Blow Counts per 6"	PID Values (ppm)	#2
ROJECT NO./NAME  2401Y03 / FC Gow PPROVED BY  3. Tyers  RILLING CONTRACTOF Aguifer Drilling & T  RILL BIT DIAMETER/TY  3.25-in. / Auger  CASING MAT./DIA.  6-inch Locking Steel Protective eet  5  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet  6-inch Locking Steel Protective eet	LOO D. RIORILLER Festing, Inc. PE BORE 10-in SCRE GROUND S	GGED BY Moss  c. / L. Adam HOLE DIAME HOLE DIAME HOLE SIOTEO SURFACE  4-Inch Locking Tes Well Plug  - CEMENT  - CEMENT  - Cement/ Bentonite Grout	TOP OF W	Brooklyn, New York  GEOGRAPHIC AREA Off Site 12th Street Sidewalk DRILLING EQUIPMENT/METHOD CME-75 / HSA  AT. SCH 40 PVC TOTAL LENGTH 2: //ELL CASING TOP & BOTTOM SCRI /  Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	2" Split S 5.0 DIA EEN G  Blow Counts per 6"	PID Values (ppm)	5/17/02-5/17/02  SLOT SIZE 20-Slot  GRAVEL PACK #2
PPROVED BY  3. Tyers  RILLING CONTRACTOF  Aquifer Drilling & T  RILL BIT DIAMETER/TY  .25-in. / Auger  .ASING MAT./DIA.  6-inch Locking  .Steel Protective  .Steel Protective  .Steel Protective  .Steel Protective	LOO D. RIORILLER Festing, Inc. PE BORE 10-in SCRE GROUND S	GGED BY Moss  c. / L. Adam HOLE DIAME HOLE DIAME HOLE SIOTEO SURFACE  4-Inch Locking Tes Well Plug  - CEMENT  - CEMENT  - Cement/ Bentonite Grout	TOP OF W	Brooklyn, New York  GEOGRAPHIC AREA Off Site 12th Street Sidewalk DRILLING EQUIPMENT/METHOD CME-75 / HSA  MAT. SCH 40 PVC TOTAL LENGTH 29 //ELL CASING TOP & BOTTOM SCRI /  Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	2" Split S 5.0 DIA EEN G  Blow Counts per 6"	PID Values (ppm)	5/17/02-5/17/02  SLOT SIZE 20-Slot  GRAVEL PACK #2
i. Tyers RILLING CONTRACTOR quifer Drilling & T RILL BIT DIAMETER/TY .25-in. / Auger ASING MAT./DIA. CH 40 PVC / 4-inc LEVATION OF: T.) 6-inch Locking pth. Steel Protective set	D. RODRILLER 'esting, Inc. 'PE BORE 10-in GROUND'S	Moss c. / L. Adam EHOLE DIAME nches EEN: YPE Slotted SURFACE  4-inch Locking Tes Well Plug  — CEMENT  - Cement/ Bentonite Grout	TOP OF W	GEOGRAPHIC AREA Off Site 12th Street Sidewalk DRILLING EQUIPMENT/METHOD CME-75 / HSA  MAT. SCH 40 PVC TOTAL LENGTH 25 //ELL CASING TOP & BOTTOM SCRI / Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	2" Split S 5.0 DIA EEN G  Blow Counts per 6"	PID Values (ppm)	5/17/02-5/17/02  SLOT SIZE 20-Slot  GRAVEL PACK #2
RILLING CONTRACTOR  quifer Drilling & T  RILL BIT DIAMETER/TY  .25-in. / Auger  ASING MAT./DIA.  CCH 40 PVC / 4-inc  LEVATION OF:  T.)  6-inch Locking pth. Steel Protective set Steel Protective	PE BORE  10-in  GROUND S  GROUND S	c. / L. Adam EHOLE DIAME nches EEN: YPE Slotted SURFACE  4-inch Locking Tes Well Plug  — CEMENT  - Cement/ Bentonite Grout  - 4-inch PVC	TOP OF W	GEOGRAPHIC AREA Off Site 12th Street Sidewalk DRILLING EQUIPMENT/METHOD CME-75 / HSA  MAT. SCH 40 PVC TOTAL LENGTH 25 //ELL CASING TOP & BOTTOM SCRI / Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	2" Split S 5.0 DIA EEN G  Blow Counts per 6"	PID Values (ppm)	5/17/02-5/17/02  SLOT SIZE 20-Slot  GRAVEL PACK #2
RILL BIT DIAMETER/TY  .25-in. / Auger  ASING MAT./DIA.  CH 40 PVC / 4-inc  LEVATION OF:  T.)  6-inch Locking pth. Steel Protective steel	PE BORE 10-in SCRE h T GROUND S	HOLE DIAME nches EEN: YPE Slotted SURFACE  4-inch Locking Tes Well Plug  — CEMENT  - Cement/ Bentonite Grout  4-inch PVC	TOP OF W	DRILLING EQUIPMENT/METHOD CME-75 / HSA  IAT. SCH 40 PVC TOTAL LENGTH 25 //ELL CASING TOP & BOTTOM SCRI /  Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	2" Split S 5.0 DIA EEN G  Blow Counts per 6"	PID Values (ppm)	5/17/02-5/17/02  SLOT SIZE 20-Slot  GRAVEL PACK #2
ASING MAT./DIA. CH 40 PVC / 4-inc LEVATION OF: T.) 6-inch Locking pth. Steel Protective stand Pipe	d0-in SCRE T GROUND S	nches EEN: YPE Slotted SURFACE  4-Inch Locking Tes Well Plug  — CEMENT  - Cement/ Bentonite Grout	TOP OF W	CME-75 / HSA  IAT. SCH 40 PVC TOTAL LENGTH 25 /ELL CASING TOP & BOTTOM SCRI /  Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	2" Split S 5.0 DIA EEN G  Blow Counts per 6"	PID Values (ppm)	5/17/02-5/17/02  SLOT SIZE 20-Slot GRAVEL PACK #2
ASING MAT./DIA. CH 40 PVC / 4-inc LEVATION OF: T.) 6-inch Locking pth Steel Protective stand Pipe	SCRE T GROUND S	YPE Slotted SURFACE  4-Inch Locking Tes Well Plug  — CEMENT  - Cement/ Bentonite Grout  4-inch PVC	st Graphic Log	AT, SCH 40 PVC TOTAL LENGTH 29 //ELL CASING TOP & BOTTOM SCRI /  Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	Blow Counts per 6"	PID Values (ppm)	SLOT SIZE 20-Slot E GRAVEL PACK #2
Steel Protective Stand Pipe	GROUND S	4-inch Locking Tes Well Plug  CEMENT  Cement/ Bentonite Grout	st Graphic Log	Visual Description  Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	Blow Counts per 6"	PID Values (ppm)	E GRAVEL PACK #2
6-inch Locking Steel Protective pth. Stand Pipe	¥ 🚟	Locking Tes Well Plug	Log	Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)	Counts per 6"	Values (ppm)	REMARKS
- **** - **** - * *** - * * ** - * * * *	¥ 🚟	- Cement/ Bentonite Grout		Brown to black stained fine to medium SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)			
5 5	¥ 🚟	- Cement/ Bentonite Grout - 4-inch PVC		SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill)			
- *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - ** - *** - *** - *** - *** - *** - *** - *** - *** - ** - *** - ** -	Bentonite Grout - 4-inch PVC		Gravel; wet (fill)				
- *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - *** - ** - *** - *** - *** - *** - *** - *** - *** - *** - ** - *** - ** -	Bentonite Grout - 4-inch PVC		Brown to black fine to medium SAND, trace				
- ************************************	¥ 🚟	Bentonite Grout - 4-inch PVC		Brown to black fine to medium SAND, trace			
- ************************************	¥ 🚟	Bentonite Grout - 4-inch PVC		Brown to black fine to medium SAND, trace			
	¥ 🚟	Bentonite Grout - 4-inch PVC		Brown to black fine to medium SAND, trace			
	¥ 🚟	Grout  - 4-inch PVC		Brown to black fine to medium SAND, trace			
	¥ 🚟	- 4-inch PVC		Brown to black fine to medium SAND, trace			
	¥ 🚟		開	Brown to black fine to medium SAND, trace		{	
· · · · · · · · · · · · · · · · · · ·	¥ 🚟	well Casing	脚	Brown to black fine to medium SAND, trace			
· · · · · · · · · · · · · · · · · · ·			開	Brown to black fine to medium SAND, trace	_		
·			$\Gamma \Gamma \Gamma \Gamma \Gamma \Gamma \Gamma \Gamma \Gamma \Gamma \Gamma$		1 1	>2000	Odor
<del>-</del>			亚亚亚	Gravel, trace Silt, trace Coarse Sand; wet	ا ار	Ā	
	_	- Bentonite	1	\((fill)\) PEAT; moist	/  ľ	T	Thickness of peat Interval interpreted from previous S
		Chips	r 7r 77		_		investigation
				Brown fine to coarse SAND, trace Silt, trace Gravel; wet		>2000	
1.5.2				addo Cidrel Mer			
					}		
<u>.</u>			[# <u>F</u> 4	Gray-brown fine to medium SAND, little		>2000	Odor
1	. 🗐 : :			Silt, trace coarse Sand; wet			
			F		`  <b> </b>		
- 1				Grow brown fine to madium CANID 1941-		520	04-4
			<u> </u>	Gray-brown fine to medium SAND, little Silt, trace coarse Sand; wet			Odor
			T = T				
		<ul> <li>20-Slot PVC</li> <li>Well Screen</li> </ul>				1	
		71011 0016611			1		
. III		•		Gray-brown fine to medium SAND, little		54.9	Odor, free product
.				Silt, trace coarse Sand; wet		•	· ·
		. #2 Cand					
		- #2 Sand					
- [8]				Gray-brown fine SAND, little Silt, trace		280	Odor, free product
				coarse Sand; wet			
						•	
						41	
<u>-</u>			FI - I	Gray-brown fine to coarse SAND, little Silt;		>2000	Odor, free product
·			15.	wet			Ouoi, nee ploudet
			- T - T			H .	
						1	
						>0000	
				Gray-brown fine to coarse SAND, little Silt;		>2000	Odor, free product
- 1				wet .			
-		- 5-foot PVC Sump	[. <u>.</u>			<b>I</b> I	
-		• •					
<u>)                                    </u>		- Push on PVC Well Cap	<u> </u>		ا لـ	<b>a</b> ll	Bottom of well 50 feet below



1377 Motor Parkway Islandia, NY 11749 Telephone: 631-232-2600 Fax: 631-232-9898

WELL CONSTRUCTION LOG Page of EASTING WELL NO. NORTHING RW-43 PROJECT NO./NAME LOCATION 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY Brooklyn, New York GEOGRAPHIC AREA G. Tyers M. Kroll DRILLING CONTRACTOR/DRILLER Aquifer Drilling & Testing, Inc. / L. Adams Off Site 12th Street Sidewalk DRILL BIT DIAMETER/TYPE DRILLING EQUIPMENT/METHOD SAMPLING METHOD BOREHOLE DIAMETER START-FINISH DATE 6.25-in. / Auger CME-75 / HSA 2" Split Spoon 5/20/02-5/20/02 10-inches CASING MAT./DIA. SCREEN: MAT. SCH 40 PVC TOTAL LENGTH 25.0
WELL CASING TOP & BOTTOM SCREEN SCH 40 PVC / 4-inch TYPE Slotted DIA. 4-inch SLOT SIZE 20-Slot ELEVATION OF: GROUND SURFACE TOP OF WELL CASING **GW SURFACE GRAVEL PACK** (FT.) 6-inch Locking 4-Inch Deptin Steel Protective Locking Test Blow PID Graphic Stand Pipe Well Plug Visual Description Counts Values REMARKS feet Loa per 6* (ppm) Brown to black stained fine to medium CEMEN SAND, little Silt, trace coarse SAND, trace Gravel; wet (fill) 5 Cement/ Bentonite Grout 10 10 ٠. 1-inch PVC 268 Grey to light brown fine to medium SAND, some Silt, little Clay; wet Slight odor, some staining Well Casing >2000 Slight odor, some staining 15 15 Brown fine to coarse SAND, some Silt; wet >2000 Bentonite Chios 20 20 907 Brown fine to medium Sand and Silt, some Odor Clay, trace Gravel; wet 25 25 1235 Brown fine to medium Sand and Silt, some Odor Clay, trace Gravel; moist 20-Slot PVC Well Screen 30 30 >2000 Brown fine to coarse SAND, some Silt and Odor Clay; wet #2 Sand 35 1226 Brown fine to coarse SAND, some Slit and Odor Clay; wet ROUXGDT 40 40 >2000 Brown fine to coarse SAND, some Silt and Odor Clay; wet 45 >2000 Brown fine to coarse SAND, some Silt and Odor Clay; wet - -5-foot PVC Sump ING/WELL 50 50 Push on PVC Bottom of well 50 feet below Well Cap land surface



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WELL CONSTRUCTION LOG Page of WELL NO. NORTHING EASTING **RW-44** PROJECT NO,/NAME 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site LOGGED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Off Site 12th Street Sidewalk Aquifer Drilling & Testing, Inc. / L. Adams DRILL BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 2" Split Spoon 6.25-in. / Auger 10-inches CME-75 / HSA 5/21/02-5/21/02 CASING MAT./DIA. SCREEN: SCH 40 PVC / 4-inch MAT. SCH 40 PVC TOTAL LENGTH 25.0 TYPE Slotted DIA. 4-inch SLOT SIZE 20-Slot TOP & BOTTOM SCREEN GRAVEL PACK **ELEVATION OF: GROUND SURFACE** TOP OF WELL CASING **GW SURFACE** (FT.) 6-inch Locking 4-inch Steel Protective Locking Test Well Plug PID Blow Graphic Stand Pipe Visual Description REMARKS Counts Values feet per 6" (ppm) Brown fine to coarse SAND, trace Silt and -CEMENT 32.7 Gravel; wet (fill) 5 Cement/ Bentonite Grout 10 4-inch PVC Well Casing . . 0.0 Brown gray fine to medium SAND, little Silt; 15 Brown PEAT and green-gray Clay Bentonite Chips 3.7 Brown fine SAND, some Silt, trace coarse - -Sand and Gravel; wet 20 25 25 41.7 Brown fine SAND, some Silt, trace coarse Sand and Gravel; wet . . 20-Slot PVC Well Screen 30 30 45.3 Brown fine SAND, some Silt; wet Organic odor - -#2 Sand 35 35 77.2 Brown fine SAND, little silt, trace coarse Sand; wet Odor 40 137 Brown fine SAND, some Silt; wet Odor 45 45 87.6 Brown fine SAND, some Silt; wet 5-foot PVC Odor, free product - -Sump 50 50 Push on PVC Bottom of well 50 feet below land surface



Page 1 of 1 WELL CONSTRUCTION LOG

Page 1 of	1		WE	LL CO	NSTRUC	TION LOG				
WELL NO.		NORTHI			EASTING				*	-
RW-1S					LOCATION					
PROJECT NO /NAI 92401Y03 / FC		e former N	ACD SI	ta	124-136 2n	d Avenue			•	
APPROVED BY	Gowanus	LOGGE	BY	ie				•		
G. Tyers		D. Mos			Brooklyn,	New York				
DRILLING CONTRA					GEOGRAPHIC	CAREA				
Aquifer Drilling DRILL BIT DIAMET	g & Testin	<b>ig, Inc. / L</b> BOREHOLI	Adam	IS	Off Site 12	th Street Sidewalk UIPMENT/METHOD	SAMPLING	METHOD	START-FINISH D	NATE
6.25-in. / Auge		10-inche		IEK	CME-75 / H		2" Split S		4/22/02-4/22/	
CASING MAT./DIA	<u>.</u>	SCREEN:		<u> </u>	OINL	IOA	z opiice	ροσιι	41ZZIOZ 41ZZI	<u> </u>
SCH 40 PVC /	4-inch	TYPE	Slotted	М.	AT. SCH 40 P\	C TOTAL LENGTH 1	0.0 DI	A 4-inch	SLOT SIZE 20	-Slot
ELEVATION OF:	GRO	OUND SURF	ACE	TOP OF W	ELL CASING	TOP & BOTTOM SCR	EEN G	W SURFACE		
(FT.) Flush Mou	int	∠ <b>4-i</b>	nch						#2	
Depth, Manhole Cove			cking Tes ell Plug	t Graphic			Blow	PID		
feel			ell Plug	Log	Visual	Description	Counts per 6"	Values (ppm)	REMARKS	
······································		7 22		0:00:0	Concrete		- FEI 0	(pp)		
•	000	O SE Con	crete	A. A. A. A.			_			
	0.0	0.0				rse SAND, little Silt, trace crete; dry to wet at 3 feet				
<del></del>		(C		HHH	(fill)					
			tonite	FFFF	-		[			
		Chip	98	HHH	•				•	
			•							
				HHH					•	
2 2 ×	-	4-inc	h PVC	口口口					•	-
		Well	Casing	HHH						
				ppp				[[	•	
				HHH						•
				ppp						
5				HHH						
<del></del>				HHH		rse SAND, little Silt, trace				_
				四四	Gravel; wet (fill)					
				HHH	•			¶		
				四世					•	-
				HHH				[		
. •				四四				12.1	Odor	-
		[編]		HHH					Guoi	•
		1 /		mm						
, <del>-</del>		20-9 PVC	Sot Well Screen	1444						•
				四四						
		- #2 S	Sand	1444					•	
		"-"	red	四四						
		1 1		1444						
10_				m	Brown fine to coa	rse SAND, little Silt, trace			-	_1
				四四	Gravel; wet (fill)	or and, mus om, nace				
				FFFF				<b>[</b>		
-				tttt					•	
				1444					•	
				EEEE I				23.8		
· =		]		FFFH				23.6	Odor	
*				HHH						
				FATH	•					
				HHH					•	
				<b>在</b> 在					· ·	
				<del>233</del>	PEAT and green-	grey CLAY; moist				,
				7 77 77		0 -3				
15	_   -	2-for	ot PVC	1 1	•	4		7		_1
<u> </u>		Sum	np	77 77 7						
				777 77				<b> </b>	•	
		Pusi Wei	h on PVC I Cap	<u> </u>	· · · · · · · · · · · · · · · · · · ·					
٠			•						Bottom of well at 16 below land surface	feet
					•	•			CONTRACTOR SUITAGE	
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WELL CONSTRUCTION LOG Page of WELL NO. NORTHING EASTING **RW-2S** PROJECT NO./NAME LOCATION 124-136 2nd Avenue 92401Y03 / FC Gowanus former MGP Site APPROVED BY LOGGED BY G. Tyers D. Moss Brooklyn, New York DRILLING CONTRACTOR/DRILLER GEOGRAPHIC AREA Aquifer Drilling & Testing, Inc. / L. Adams Off Site 12th Street Sidewalk DRILL'BIT DIAMETER/TYPE BOREHOLE DIAMETER DRILLING EQUIPMENT/METHOD SAMPLING METHOD START-FINISH DATE 6.25-in. / Auger 2" Split Spoon 10-inches CME-75 / HSA 4/22/02-4/22/02 CASING MAT./DIA. SCREEN: MAT. SCH 40 PVC TOTAL LENGTH 10.0
TOP OF WELL CASING TOP & BOTTOM SCREEN TYPE Slotted SCH 40 PVC / 4-inch DIA. 4-inch SLOT SIZE 20-Slot **ELEVATION OF:** GROUND SURFACE GW SURFACE GRAVEL PACK Flush Mount 4-inch Manhole Cover Locking Test Well Plug PID Blow Depth, Graphic Visual Description Counts Values REMARKS Log per 6" (ppm) 0.0 0:0 000 .a:< Concrete Brown fine to coarse SAND, little Silt, little 00 Gravel, trace Concrete; dry to wet at 3 feet Bentonite 4-inch PVC Well Casing 5 Brown fine to coarse SAND, little Silt, little Gravel; wet (fill) 28.6 20-Slot PVC Welt Screen #2 Sand 10 Brown fine to coarse SAND, little Silt, little Gravel; wet (fill) 27.2 6/11/02 Odor and sheen ROUXGDT RECOVE-1.GPJ 15 15 PEAT and green-grey CLAY; moist 1-foot PVC Sump 11/ 11/ SORINGAWELL Push on PVC Bottom of well at 16 feet below land surface